THE

BRITISH JOURNAL

OF

CHILDREN'S DISEASES.

VOL. I. JUNE, 1904. No. 6.

Original Articles.

STRANGULATED INGUINAL HERNIA IN AN INFANT TWENTY-EIGHT DAYS OLD; OPERATION TWO DAYS LATER; RECOVERY.*

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THE following report was made by Mr. H. H. Mayle, the Ward Clerk.

J. E—, who was born on June the 27th, 1903, was admitted into Guy's Hospital on July the 27th, 1903, suffering from a strangulated right inguinal hernia.

He was the first child of healthy parents and had been breast fed. He grew fat and looked well, but the mother stated that he frequently seemed in pain, often crying when passing urine or fæces, and sometimes vomiting part of the milk taken.

On the evening of Saturday, July the 25th, when being washed, the child's scrotum was noticed to be swollen. The same night he was seized with a violent fit of screaming and vomited several times. A doctor was called in the next morning, but vomiting continued all day and the following night, and on Monday, July the 27th, the

* Read before The Society for the Study of Disease in Children, October the 16th, 1903.

medical man advised the parents to bring the child to the hospital. His bowels had not acted for two days, and he had vomited everything he had taken since Saturday.

When admitted into the hospital he appeared to be a plump, healthy child, suffering from pain and sickness, with a distended abdomen.

On examining the scrotal region three distinct swellings were observed. The scrotum itself was dark blue in colour, firm, and distended. Above this, in the right inguinal region, another tense swelling was found. There was a distinct interval between the two, in which the cord could be felt. The left half of the scrotum was empty, but the left testis could be felt just outside the external abdominal ring forming the third swelling.

Mr. Clement Lucas, on examining the case, determined to explore the upper swelling on the right side at once, thinking this might be a strangulated funicular hernia. The swelling in the scrotum, which was tense and dark, he attributed to serous effusion and blood, partly as the result of pressure above and partly due to taxis. On the left side the testis had not descended into the scrotum, and was probably associated with an unclosed vaginal process of peritoneum into which some fluid from the abdomen, which quickly follows obstruction in infants, had probably made its way.

The operation was performed about 3.30 p.m. on July the 27th. A.C.E., and subsequently chloroform, were administered, and Mr. Lucas cut down upon the right inguinal swelling, making an oblique incision in the direction of the inguinal canal. When the skin and superficial fascia had been divided, the swelling exposed was dark blue in appearance. To explore its relation to the testis the right testis was pushed up into the wound and the tunica vaginalis showed blood extravasation, as if the result of taxis. The two swellings were not continuous except so far as the cord connected them. Picking up the sac it was divided with scissors, when some blood-stained serum escaped, and at the bottom a small knuckle of intestine was exposed. This was about the size of the end of one's forefinger, and dark purple in colour, but it had not lost its lustre. A blunt dissector was passed up by the side of the bowel, and by drawing the instrument forwards the neck of the sac was stretched, after which the bowel was, by gentle pressure, slipped back into the abdomen. Some drachms of clear serous fluid escaped from the abdomen after the bowel had been replaced. The sac was tied and cut away, and two buried silk sutures were put across the canal and ring to complete a radical cure. A continuous horse-hair suture was used

for the skin. A sealed dressing of gauze, collodion, and iodoform was applied to protect the wound, and cyanide dressings over.

The patient's temperature rose to 103·6° the same night, but fell to normal on the following day, and never again rose higher than 99° whilst in the hospital. His bowels acted freely during the night and vomiting ceased after midnight.

July the 30th.—The patient was dressed for the first time, and the scrotum showed signs of irritation, due probably to the antiseptic dressings. The temperature varied during the day from 98° to 99°. Boracic fomentations were applied.

August the 7th.—The stitches were removed, as they were causing slight superficial suppuration. Temperature had continued normal.

August the 9th.—The boracic fomentations were discontinued and dry dressings applied.

August the 11th.—A sealed collodion and gauze dressing was applied.

August the 12th.—The wound being soundly healed and the child in excellent health, he was to-day discharged.

Remarks.—Strangulated hernia in infants is of special interest not only from its comparative rarity, but for the reason that it is very liable to be overlooked. Vomiting and colic from injudicious feeding are so common that the graver condition of hernial strangulation may be easily confounded therewith. The relative proportion of strangulation in children compared with adults is given by C. Stern* as 1 to 108, which is easily accounted for by the greater elasticity of the tendinous and fibrous structures in young children. It will be noticed that the form of hernia present in the case related was that known as "funicular," the upper part of the vaginal process of peritoneum into which the hernia had descended being shut off from the tunica vaginalis of the testis. Howard Marsh† relates a similar case in the 'St. Bartholomew's Hospital Reports' for 1874, and gives a table of forty-seven cases of strangulated hernia occurring in children under the age of fourteen. Of these all except four were herniæ into congenital sacs. Two of the exceptions were cases of the "Infantile hernia of Hey," and two others did not communicate with the tunica vaginalis, and were therefore probably funicular. Of twenty-five in which the side was mentioned nineteen were on the right and only six on the left.

The first series of cases of strangulated hernia in children appears

* 'Centralblatt für Chirurgie,' 1894.

† 'St. Bartholomew's Hospital Reports,' 1874.

to have been collected by Rovoth* in 1858, who put on record 30 cases. Sariel,† in 1894, collected 128 cases. Knoblach and Stern‡ collected 153 cases, of which 138 were inguinal, 14 umbilical, and 1 femoral. Moynihan,§ who published a case in 1897, concluded from the foregoing researches that strangulation was more common in the earlier months of childhood than in the later, as shown by the following table of cases occurring during the first twelve months:

During the	1st	month	16	cases	occurred.
,,	2nd	,,	15	,,	,,
,,	3rd	,,	14	,,	,,
,,	4th	,,	9	,,	,,
,,	5th	,,	4	,,	,,
,,	6th	,,	7	,,	,,
,,	7th	,,	3	,,	,,
,,	8th	,,	6	,,	,,
,,	9th	,,	9	,,	,,
,,	10th	,,	3	,,	,,
,,	11th	,,	3	,,	,,
,,	12th	,,	4	,,	,,

He also drew attention to the fact that retention of urine is frequently mentioned as present.

The seat of strangulation is in a majority of cases at the neck of the sac; thus Sariel found it in this situation in 58 out of 81 cases examined. The next point of frequency for the constriction is at the external abdominal ring. Marsh found it there in 7 out of 32 cases in which the site was mentioned.

Cases of strangulated hernia in infants under one year of age have been recorded in this country by Macnamara,‖ Beck,¶ Dobbin,** Haslewood,†† Steele,‡‡ D'Arcy Power,§§ Kidd,‖‖ Maclaren,¶¶ and MacLaurin.***

* 'Die herniatomie bei kindern. Deutsche klinik,' No. 29, 1858.
† 'Revue mensuelle des maladies de l'enfance,' May, 1894.
‡ 'Centralblatt für Chirurgie,' 1894.
§ 'Lancet,' September 25th, 1897, vol. ii, p. 789.
‖ 'Lancet,' vol. ii, 1879, p. 505.
¶ 'Brit. Med. Journ.,' vol. ii, 1882, p. 1151.
** 'Lancet,' vol. i, 1884, p. 979.
†† 'Lancet,' vol. ii, 1884, p. 1171.
‡‡ 'Lancet,' vol. ii, 1899, p. 279.
§§ D'Arcy Power, 'Lancet,' vol. ii, 1899, p. 889; and vol. i, 1901, p. 1536.
‖‖ 'Lancet,' vol. ii, 1899, p. 1016.
¶¶ 'Lancet,' vol. ii, 1899, p. 1094.
*** 'Lancet,' vol. 1, 1900, p. 1281.

The symptoms almost invariably commence in infants with a violent fit of screaming which cannot be pacified, indicating that the child is suffering agony. This form of commencement is usually present in other forms of obstruction, such as intussusception, from which the presence of an irreducible hernial tumour devoid of impulse sufficiently distinguishes it. Vomiting rapidly follows, and persists or recurs whenever the infant is put to the breast or fed. Constipation is usually not noticed till some hours later, and then the mother frequently notices another change—that the diapers are seldom, if at all, moistened by urine. Suppression or great diminution in the amount of urine passed, when occurring in adults during obstruction, is generally accepted as indicating that the constriction is high up in the small intestine. This does not appear to be a sufficient explanation of the cases under discussion. It is possible that spasmodic retention may account for a limited number in whom reduction is early effected; but the general depression of circulation and tendency to collapse, which rapidly supervenes upon strangulation in infants, probably accounts better for what is a suppression of urine rather than a retention.

Another point to which I wish particularly to draw attention is the rapid effusion of a large quantity of serous fluid into the sac, so as to render it for the most part transparent. This has more than once led to an error in diagnosis, and the sacs have been tapped as hydroceles. This serous effusion is not confined to the sac of the hernia, the general peritoneal cavity sympathises and pours out fluid as the case goes on. It will be noticed in the case related, that in addition to the serous effusion into the funicular sac which contained the bowel, there was a large collection in the tunica vaginalis below forming a tumour of considerable size quite separate from the sac, and further, that the fluid escaping from the abdominal cavity into a congenital sac associated with an undescended testis on the left side, formed a third tumour in the left inguinal region.

Another symptom much more marked in infancy than in adults is the early tendency to collapse. This, again, is easily accounted for by the necessity in early infancy of frequent feeding and the rapid loss of nutrition dependent on the persistent vomiting. Pain, too, which is ill-borne by infants, doubtless contributes to the collapse. When, however, relief has been afforded, the natural recuperative force of childhood will in the majority of cases, where asepsis can be maintained, bring about a rapid recovery.

To sum up the symptoms peculiar to infants as compared with adults: first, there is the violent screaming fit impossible to pacify;

secondly, the tendency to suppression of urine as well as constipation; thirdly, the rapid effusion of serous fluid into the sac, rendering it translucent, and effusion into the general peritoneal cavity; fourthly, the greater tendency to rapid collapse.

A CASE OF CONGENITAL COXA VARA WITH ASSOCIATED DEFORMITIES.

By J. Jackson Clarke, M.B.Lond., F.R.C.S.,

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Depression or incurvation of the neck of the femur, otherwise known as coxa vara, is of rare occurrence as a congenital condition; the only recorded case that I am aware of is that of Kredel.* The condition is of importance, since it is very likely to be mistaken for congenital dislocation of the hip, and then a wrong method of treatment would probably be adopted.

A case that came under my care last year was that of a girl aged 2 years. A skiagraph of the pelvis is shown in Fig. 1. It shows the neck of the left femur to be bent to a right angle with the shaft of the bone, whilst the upper end of the femur on the right side is normal, the neck of the bone forming a very obtuse angle with the shaft. There were other deformities, also congenital, in both lower limbs; on the left side the knee was bent at an angle of nearly 45°, and no trace of the corresponding patella could be felt; the quadriceps extensor of the knee also appeared to be absent, not being appreciable to palpation, and the child had no power of actively extending the knee when the latter was fully flexed. The foot was in a condition of severe talipes equino-varus, and the left lower limb was stunted, being fully three inches shorter than the right. These two latter peculiarities are shown in the photograph, Fig. 2. The abnormalities of the right lower limb do not appear in the photograph, though they were well marked and consisted in an over-flexed condition of the knee (*genu recurvatum*) and talipes calcaneo-valgus.

Two other features are apparent in the skiagraph. First, the sacrum appears to be deflected towards the deformed left side and, second, the upper part of the os innominatum is flattened, apparently

* Kredel, 'Cent. fur Chir.,' No. 42, 1896.

from the pressure of the neck of the femur; for this, like the other deformities present, can reasonably be explained by assuming that the limbs had in intra-uterine life been cramped in an abnormal position.

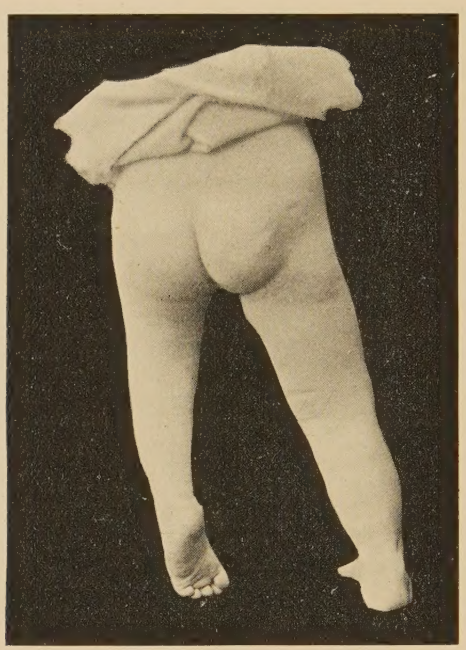
The clinical aspect of the case may be simply expressed. The patient was sent to me as a case of congenital dislocation of the hip. The patient had never attempted to walk, and the parents had been given to understand that she never could be made to walk. On

Fig. 1.

examination many of the characteristic features of congenital hip-dislocation were present. Thus (1) the great trochanter was elevated to the level of the anterior; (2) abduction of the limb was limited, the adductors becoming tense when the thigh was brought to the line of the trunk; and (3) there was an unnatural hollowness of Scarpa's triangle. I could not, however, feel the head of the femur on the dorsum ilii, as is usual in a dislocation associated with inversion of the limb, as was the case in this instance, nor could I obtain any up and down movement of the trochanter on alternately pushing up and drawing down the limb. Any doubt that remained was put at rest by the excellent skiagraph that was obtained in a somewhat rebellious

patient by Messrs. J. and H. Davis. Before concluding that the coxa vara was a congenital one, the possibility of its being due to rickets had to be considered. The child had fairly well-marked rickets among other signs, the fontanelle was still fairly large, and the dentition delayed. The position of the limbs noticed at birth, the associated deformities of the pelvis as seen in the skiagraph, tell conclusively in favour of the congenital origin of the coxa vara. It might also be thought that the fact that the child had never walked

Fig. 2.



would prove that the deformity was congenital, but against this it might fairly be urged that in severe rickets coxa vara may develop before walking begins.

Treatment.—A few words may be added as to the treatment of this case. The foremost indication was to encourage growth in the left limb, and to this aim it was most important to enable the patient to walk as soon as possible. Before this could be effected the adduction and inversion of the limb must be corrected. This I did by a free subcutaneous division of the adductors and the anterior parts of the glutei medius and minimus and tensor fasciæ femoris. The knee

also had to be brought straight by complete open division of the adductors. It was a question, in view of the shortness of the left limb, whether it would be better to leave the foot in the equinus position. I decided this in the negative, from past experience of the bad effect on growth that such a position in infancy entails. I therefore fully corrected the equino-varus. The patient left for home two months after the commencement of treatment. Needless to say I fully prescribed daily passive exercises and massage, and designed and applied appropriate instruments, without which the good effect of the operative treatment would have been in vain. The parents carried out my instructions completely, and after six months again brought the child to see me. One most interesting feature to be noted was that the patella of the left side had appeared in the interval, and I am hopeful that evidence of the presence of some of the quadriceps extensor will follow. The child, wearing a 3-inch patten on the left boot and her instruments, can walk readily round a table, helping herself a little by the hands, and she can unaided already take a few steps forward. Both feet are now normal in form. The left knee is improving under the influence of an apparatus that maintains complete flexion during the night-time.

TWO CASES OF MICROPHTHALMOS, ONE SLIGHT AND THE OTHER EXTREME.*

By Sydney Stephenson, C.M.,

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Case 1.—Albert W—, aged 6 years, first seen at the North-Eastern Hospital for Children on March the 31st, 1904. The child is moderately intelligent, and, save for his eyes, presents no obvious deformity beyond preputial adhesions and a poorly-marked post-anal dimple. His face and legs are deeply pitted from a recent attack of smallpox. Height, 37½ in.; weight, 37½ lbs. A small convergent squint of the left eye is present. The eyes and eyelids are obviously small. The palpebral fissure on each side is 23 mm. in length and 6 mm. in height. The transverse diameter of each cornea measures 8 mm. There is fairly rapid lateral nystagmus, which practically ceases when the lad looks strongly upwards or downwards. There are traces of connective tissue about the central

* Read before The Society for the Study of Disease in Children, April the 15th, 1904.

vessels on each optic disc. No coloboma of the choroid or other coarse fundus change. Refraction (estimated under eumydrine) :—

$$\text{R. E.}: \frac{+\ 3{\cdot}0 \text{ sph.}}{+\ 2{\cdot}0 \text{ cyl. } 90^\circ}; \quad \text{L. E.}: \frac{+\ 8{\cdot}0 \text{ sph.}}{+\ 1{\cdot}0 \text{ cyl. } 90^\circ}.$$

Case 2.—Muriel E—, aged 1 year and 4 months, first seen at the Evelina Hospital on March the 22nd, 1904. The baby had been born at term, after a labour lasting two days, without instruments. She was born apparently without eyes. There is no family history of deformities.

The normal position of the eyes is marked by a depression, just as if the eyes had been removed surgically. No facial paralysis. Eyebrows, nose, and neighbouring parts well formed. The palpebral fissure on each side measures 5 mm. in length. Upper cilia thick and numerous; lower cilia finer and more scanty. Tears run over the cheek whenever the baby cries, which she does during the whole of the examination. Upon deep palpation through the upper eyelids a small body, resembling a pea in size and shape, can be felt in each orbit. It is difficult to separate the eyelids, but when this is done by a small speculum, mucous membrane can be recognised, but nothing more.

Remarks.—The two foregoing cases, although at first sight they appear to be very different, are both, I think, examples of microphthalmos. The elder child shows merely unusually small eyes and eyelids, lateral nystagmus, convergent squint, and hypermetropic astigmatism of greater degree in one eye than in the other. The associated congenital conditions include preputial adhesions and a post-anal dimple. In the younger child the conditions are very different. The eyebrows, nose, and neighbouring parts are well formed, but the eyes themselves appear to be absent. When the eyelids are separated (by no means an easy thing to do) a mucous membrane can be recognised lining the interior of the palpebral aperture. When the child cries, tears run over the cheek from between the palpebral fissures. Upon deep palpation through the upper lids a small body, like a pea, can be felt towards the back of each orbit. No other deformities are present.

Not many years ago my first case would have been called one of microphthalmos and my second anophthalmos. It is now becoming recognised, however, that both are instances of microphthalmos, although of very different degrees. The term anophthalmos, strictly speaking, should be applied only to cases where no rudiment of the eyeball can be either seen or felt in the orbit, even when the

examination is made under a general anæsthetic. Such cases undoubtedly occur, but they are extremely rare. In some of those examined the optic nerve does not enter the orbit or is absent altogether, while in others there is no optic chiasma or tract, or the external geniculate bodies or the optic foramen is missing. There have been one or two instances where the olfactory lobe was absent as an associated lesion. In all likelihood the small body present in the orbit in my second case represents a rudimentary eyeball containing more or less immature nervous elements, and upon that ground I prefer to regard it as an example of extreme microphthalmos rather than of anophthalmos.

In some cases of extreme microphthalmos more or less delicate cysts have been found to be connected with the ill-developed eyeball. These are interesting from a developmental point of view, since they contain tissue that may be recognised as of retinal origin. This modified retinal tissue is found upon dissection to be anatomically continuous with the folded retina which lines the rudimentary eyeball. No cyst of the kind described can be made out in my second case.

In discussing the question of microphthalmos *versus* anophthalmos, E. T. Collins and J. H. Parsons ('Trans. Ophthal. Soc.,' vol. xxiii, 1903) have recently pointed out that the essential element of an eye is the nervous mechanism, receiving visual sensations and transmitting them to the brain. They suggest that when there is complete failure in the development of this mechanism—as, for example, when the chiasm or the optic nerve is absent—the condition should be regarded as one of anophthalmos. On the other hand, if the eye is smaller than usual, and there is even an imperfect attempt at the formation of the nervous mechanism, the case is to be looked upon as one of microphthalmos. It is unfortunate that this scientific distinction between the two conditions is one that can be established with certainty only by a microscopic examination.

THE TREATMENT OF HERNIA IN YOUNG CHILDREN.*

By P. Lockhart Mummery, M.B., B.C., F.R.C.S.,

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I think this subject is a very important one, and a profitable one for discussion in this Society.

* Read before The Society for the Study of Disease in Children, February the 19th, 1904.

This Society now holds an important position as an authority upon the treatment of children's diseases, and any statement of opinions which will aid in establishing a satisfactory method of treatment, especially for such a common condition as that of hernia, cannot fail to be of value.

And it is rather with the object of starting a discussion, and obtaining a definite opinion upon this important subject than with the object of bringing before you anything new or original, that I am reading this paper.

The number of cases that one meets with of hernia in infants and young children is very considerable, and it has always seemed to me that the treatment of these cases in young children by the use of trusses is very unsatisfactory.

There are several reasons for this. In the first place, it is not an easy matter with a fat baby to obtain a truss which will remain in position and keep back a hernia without having one with a very strong spring, and this is apt to result in a short time in considerable soreness of the skin, which in infants is very ill adapted to withstand pressure.

The old wool or worsted truss, which is so much vaunted in all the text-books, and which is still used as a pitfall for the examination student, is, so far as my experience goes, absolutely useless. Its only value seems to consist in the fact that it enables the child to be taken home before the hernia comes down again. Even if the wool truss were capable of keeping up the hernia, it is quite useless as a curative agent, as it does not cause sufficient pressure upon the neck of the sac to have any chance of obliterating it.

The only cases in which the use of a truss can be expected to be of any real service in curing a hernia in a child are those cases where the parents are sufficiently well off to be able to obtain the services of a skilled nurse to look after the child, and to pay for the necessary trusses. Then, if the nurse is able to change the truss without allowing the hernia to come down, and is able to prevent the child's skin from getting chafed by the constant pressure of the truss, a satisfactory result may be sometimes obtained.

However, it will be necessary for the child to wear the truss constantly, night and day, and even then the time before a cure of the hernia can be expected to take place is considerable. It is seldom, even under the most favourable conditions, that anything approaching a real cure of the hernia can be secured in less than a year, and in most cases it is two years or more before the truss can be dispensed with, while in many cases the use of the truss fails altogether

to cure the condition. So that even under the most favourable circumstances the use of a truss for the purpose of curing a hernia in a child, means that we must condemn the child to wear a truss constantly for a period of probably two years, and that even then we may quite fail to cure the hernia. And if we are successful in effecting a cure of the hernia in the sense that it no longer comes down, we leave the child with a condition which in many cases predisposes to hernia later on in life. For the treatment with a truss, even if successful in curing the hernia, still leaves the sac partly unobliterated, since in most cases the sac is congenital and cannot be returned into the abdomen. This leaves the child with a hernial sac which is ready at any time to receive a hernia should the abdominal wall give way. And, in fact, the child is predisposed to the recurrence of the hernia later on in life.

That this may occur is shown by the following case :

A sailor boy, aged 14, came to St. George's recently to be operated upon for a scrotal hernia which had appeared after a strain two months previously. His history showed that he had had an exactly similar hernia when an infant, and that it had been apparently cured after wearing a truss. I suppose the neck of the sac had been partly obliterated by the pressure of the sac, sufficient to keep up the hernia, but when the boy began to lead an active life the adhesions in the neck of the sac were no longer able to bear the strain, and the old hernia recurred.

And although it is very difficult to obtain any statistics upon this point, the conditions found in a large number of cases of hernia in adults seem to show that this occurs much more commonly than is generally supposed.

As regards the use of a truss for the treatment of cases met with in hospital practice, I think that it is very rarely of any use. The mother is seldom sufficiently intelligent to be able to change the truss without allowing the hernia to come down, and even if she is, the expense of two trusses to start with and the subsequent new trusses and repairs that will be necessary renders it impossible in most cases to satisfactorily carry out the treatment. As a rule one finds that the hernia constantly comes down behind the truss, and that the latter is simply pressing upon the neck of the sac; in which case the truss is not only useless but is a source of danger, as it predisposes to strangulation.

When, as is the case with children and infants, the object of the truss is to cure the hernia by causing obliteration of the neck of the sac, it is most important that the hernia should not come down at all.

And this requires much more care and attention than most out-patient mothers are able to afford.

I think the most satisfactory method of treatment of these cases is by operation.

The objection that surgeons had against operating upon young children is almost a thing of the past, and we now know that children stand operations almost as well as adults, providing always that certain precautions are taken.

The treatment of hernia by operation has two great advantages.

First, that it gets rid of the sac, and, secondly, that it enables us to cure the hernia in the space of about three weeks, and does not necessitate the wearing of an instrument by the child.

The operation which I have performed in these cases, and which I am inclined to think is a very suitable one, is a modification of Barker's operation. The usual incision is made, and the sac separated up to the internal ring. The sac is opened, and with one finger inside to act as a guide and to keep back the intestine, the neck of the sac is ligatured over the point of the finger as high up and as near to the internal ring as possible. The sac is then cut away on the distal side of the ligature. The peritoneum is separated slightly with the point of the finger from around the internal ring. One end of the ligature is threaded upon a hernia needle of suitable size, and the needle is passed into the internal ring and made to perforate all the thickness of the abdominal wall from the inside, so as to emerge about half an inch above the ring. The other end of the ligature is threaded and brought through the abdominal wall in a similar manner, so as to emerge a little distance from the first end of the ligature. Then, by drawing upon the ends of the ligature, the neck of the sac is drawn away from the internal ring, and the ends are tied together, so as to retain the neck of the sac in its new position.

The internal ring is not stitched up. I think that, at any rate in infants, it is neither necessary nor advisable to stitch up the ring; the tissues are very delicate and badly adapted for stitching, and if the cause of the hernia, namely, the congenital sac, is removed, the ring itself soon contracts and gets rid of any weak spot in the abdominal wall. Moreover, by not stitching up the ring a good deal of time is saved, and this is a matter of great importance when operating upon young children. In older children, or where the ring is very large, it is better to close the ring with one or two stitches. In many cases the operation may be simplified by not dissecting out the scrotal portion of the sac, but dividing it above.

This operation is very quickly performed, and this is a desideratum of the greatest importance in operating upon infants. The chief difficulty in the operation is in defining the sac, which is often extremely thin and delicate.

In all these cases the after-treatment of the case is a most important factor, and the chief point is, I think, the position in which the child is nursed.

The best position in which to nurse the child after a radical cure of hernia is with the legs slung up to a cross-bar.

Stirrups are attached to each leg by means of extension strapping, and both legs are slung up to a horizontal bar over the top of the cot, in much the same way as in treating a fracture of the shaft of the femur by Bryant's method.

This position has several advantages :

1. It is comfortable, and at the same time prevents the child from moving about to an undesirable extent.

2. It enables the child to be kept clean easily; a matter of no little importance in these cases.

3. It affords very valuable support to the inguinal rings, and prevents an undue amount of pressure being thrown upon them just after the operation by the child crying, etc.

4. It relaxes all the tissues in the neighbourhood of the wound and so allows healing to take place rapidly and effectually.

As regards the age at which the operation can be performed I do not think that one can fix any limit.

The youngest child I have operated upon for hernia was six months old, though I know that other surgeons have operated upon younger children.

I think, however, that it is seldom necessary, or even advisable, to operate upon very young infants for this condition. Apart from other considerations, the operation is rendered much more difficult owing to the smallness of the parts and the extreme delicacy of the sac, which is often very difficult to find.

The hernia can be safely left to itself, and so long as no truss is applied there is very little risk of strangulation. Later on, when the child is a year or eighteen months old, the operation can be performed and the hernia cured.

The risks of the operation are very slight. I do not myself know of a single case which ended fatally, or in which there was any serious complication.

I have collected thirty-nine cases of radical cure of hernia in infants and young children, and among these there was no case that

ended fatally and very few cases in which there were any complications. Out of the whole thirty-nine cases, swelling and inflammation of the testicle, on the side on which the operation was done, occurred in one case, and the swelling very quickly cleared up.

The formation of a hæmatoma in the wound occurred in two cases, and in one case the wound suppurated and there was a septic rash for a few days, which gave rise to a suspicion of scarlet fever, but it cleared up in a few days without any untoward symptoms. In several of the cases treatment by a truss had been tried and had failed.

Since I commenced to write this paper, one upon the same subject has been published in the 'Lancet' by Mr. Robert Campbell, and in it he reports 114 cases of radical cure of hernia in young children without a single death, and with very few complications. So that the risks of the operation for radical cure in infants and young children do not seem at any rate to be greater than when the operation is performed upon adults, that is to say, very slight indeed, and certainly less than the risk which a child runs from strangulation when wearing a badly fitting truss.

A CASE OF HEMI-HYPERTROPHY IN WHICH THE INTERNAL ORGANS WERE AFFECTED.*

By Robert Hutchison, M.D., F.R.C.P.,

Assistant Physician to the London Hospital and to the Hospital for Sick Children, Great Ormond Street.

Thomas F—, aged 4 months, was the fourth child of the family, the three others being healthy. He was born at full time after an easy labour, and his mother's health during her pregnancy was good. The condition about to be described was noticed at birth.

He was a healthy, well-developed child. There were three small capillary nævi in the skin, one above the right knee, one in the left lower axilla, and the other below the left scapula, but with that exception he presented no abnormality save for the condition of the left arm and leg. The viscera were healthy. The asymmetry involved the left arm and leg, and to some extent the trunk also, but the head, face, and tongue were quite symmetrical. There was no abnormality of the digits. The asymmetry of the limbs was apparently due to an increase in the subcutaneous tissues of the left side;

* Read before The Society for the Study of Disease in Children, February the 19th, 1904.

the condition in the leg, particularly, closely resembling a diffuse lipoma. Measurements showed that the left forearm was an inch and a half greater in circumference than the right, the left calf two inches greater than the right, the left thigh an inch and a half larger than the right. There was no difference in the length of the limbs on the two sides. The left chest had a circumference of one inch more than the right at the level of the nipples, whilst the left side of the abdomen at the level of the umbilicus exceeded the right by an inch and a quarter. The skin on the left side showed no difference in colour from that on the right.

The case was regarded as one of hemi-hypertrophy of the "false" sort, *i. e.* involving the soft parts only, and not affecting the bones. Shortly after he was first seen the child was attacked by broncho-pneumonia and left-sided empyema, to which he succumbed. A careful post-mortem examination was made by Dr. Salaman, of which the following are the chief results :—

The increased thickness of the left limbs and left side of the trunk was due entirely to an increased deposit of subcutaneous fat. There was no evidence of any nævoid tissue or vascular dilatation. The bones on the left side were no thicker than on the right. The brain was normal and symmetrical, and the pineal and pituitary bodies presented no abnormality. On the other hand, most of the paired organs were decidedly larger on the left side than on the right. This is shown by the following weights :—Left kidney, 56 grammes, right, 28 grammes ; left suprarenal, 42 grammes, right, 14 grammes ; left testicle, 2·3 grammes, right, 0·55 grammes. The lungs could not be satisfactorily compared owing to the presence of a left-sided empyema and pneumonia. The heart seemed normal in its development, and the two lobes of the thyroid were symmetrical.

On the other hand the left lobe of the thymus was decidedly larger than the right, but their exact relative weights do not appear in the report. The liver presented the usual degree of relative development of its left and right lobes, but contained some multiple angeiomata.

Remarks.—Post-mortem examinations on cases of hemi-hypertrophy are so rare that the above case seemed worth recording. The asymmetry of the internal organs was most striking, and suggests that the hemi-hypertrophy in such cases cannot be the result of any mere "trophic" influence, but must date back to embryonic life, and be the consequence of unequal segmentation in the ovum.

The Society for the Study of Disease in Children.

A MEETING was held on Friday, April the 15th, at 5.30 p.m., at No. 11, Chandos Street, W., Dr. C. O. HAWTHORNE in the chair.

A Case of Congenital Proptosis and Meningocele on a boy of five years was shown by Dr. JAMES TAYLOR. The mental condition was defective; recently his eyesight had been failing, and nystagmus and optic atrophy were also present.

Mr. SYDNEY STEPHENSON said that in all the cases of steeple-skulled children which he had met with, there was also a condition of pallor of the optic discs, which seemed to be secondary to neuritis. He thought a mechanical factor was probably the cause of the neuritis, as well as of the proptosis and divergence of one eye, which were constant features of such cases.

A Case of Encephalitis, originating during measles, was shown by Dr. ANDERSON SMITH (introduced). The patient, a girl of five years, at the height of an attack of measles, developed cerebral symptoms, namely, vomiting, squinting, head retraction, photophobia, and unconsciousness. At the end of five days the acute symptoms subsided, but she was found to be aphasic, resented being touched, and wasted rapidly. There was neither optic neuritis nor ear trouble. A month later she was still aphasic, could not sit up in bed, moved her limbs in an ataxic manner, and appeared to have general cutaneous anæsthesia. There was slight rigidity of the limbs, ankle-clonus, and exaggeration of the knee-jerks. More recently there had been gradual improvement in the motor power, she could say a few words, the anke-clonus had disappeared, and sensation was improving.

Dr. HAWTHORNE thought the evidence of meningitis was not clear, and suggested that the symptoms might have been due to some form of toxin. He recalled a somewhat similar condition in an adult after influenza.

Dr. Farquhar Buzzard thought that all the symptoms could be attributed to a lesion of the cerebrum, without any involvement of the spinal cord, and that there had probably been encephalitis produced by the measles toxin. As the improvement had been so marked, there was reason to hope for a good ultimate result.

Dr. James Taylor agreed as to the good prognosis, and as to toxæmia connected with the measles being the probable cause.

In reply to questions, Dr. Anderson Smith said he had thought of the possibility of the rash and other symptoms being due to cerebro-spinal meningitis and had excluded that; further, another member of the family had measles at the same time.

Two Cases of Microphthalmos were shown by Mr. Sydney Stephenson, one slight in a boy of six years, and the other extreme in a girl of sixteen months. He pointed out that a few years ago the latter would have been called a case of anophthalmos, because no eye was visible on opening the lids, and it was only on deep palpation that a small pea-like body could be felt towards the back of each orbit. These small bodies in all probability represented rudimentary eyeballs, containing more or less immature nervous elements, and upon that ground he preferred to regard the case as one of microphthalmos.

Two Cases of Anæmia were shown by Dr. E. P. Baumann. The first was in an infant of ten months, who was obviously syphilitic, and had an enlarged spleen. Blood examination showed merely the existence of a severe secondary anæmia. He considered the whole of the symptoms as secondary to syphilis. The second case was a girl of one and a half years, without evidences of syphilis, but with an enlarged spleen. Blood examination showed a well-marked leucocytosis, and also a large number of nucleated red cells, a considerable proportion of which were megaloblasts. He was inclined to regard the case as an example of pernicious anæmia in infancy.

Dr. A. E. Jones agreed with the diagnosis of pernicious anæmia in the second case, as the large number of nucleated red corpuscles was very striking.

A Case of Dactylitis with Subcutaneous Nodules in an infant of sixteen months was shown by Dr. A. Morison. He regarded the case as tuberculous.

The case was discussed by Mr. Lockhart Mummery, who recommended general treatment; by Mr. R. C. Dun (Liverpool), who advised general treatment and the fixation of the hands in splints so as to secure immobility of the fingers; by Mr. L. Bidwell, who had often found incision through the periosteum and scraping, and later on splinting, a means of shortening the duration of treatment; by Dr. H. Skelding (Bedford), who thought that the best local treatment was by a splint; and by Mr. R. P. Rowlands, who suggested that the disease might be syphilitic, judging from the density of the shadow in the skiagram.

A Case of Tuberculous Nodule in the Ponto-medullary Tract was shown by Dr. S. Vere Pearson. The patient was a boy two years old, who was suffering from weakness in and disinclination for walking, slight drowsiness, and squint in the left eye. There had been occasional retching and difficulty in walking. Definite right-limbed paresis had developed later.

Dr. Vere Pearson commented on the crossed paresis, and considered that there was a lesion of the ponto-medullary tract, probably a tuberculous growth.

Dr. HAWTHORNE referred to a case of basal tumour in a child, who developed third nerve paralysis, and who presented evidence of tubercle in other parts of the body. The tumour was found post mortem to be tuberculous.

Dr. FARQUHAR BUZZARD referred to the rarity of tuberculous tumours in this region, and to the fact that they were usually discovered accidentally after death, having produced no symptoms during life. He was inclined to regard the case as one of pontine tumour, probably gliomatous.

A Case of Paramyoclonus Multiplex in a boy of ten years was shown by Dr. C. O. HAWTHORNE. There were sudden, shock-like, clonic muscular contractions affecting both sides of the body at the same time. The bilateral and isochronous character of the contractions was well seen in the cremaster muscle. The muscles of the face, the trunk, and the thighs were also affected.

Dr. HAWTHORNE also showed (1) a case of opaque nerve fibres, and (2) a case with extreme changes in the fundus, following an injury.

The following papers were read :

A Case of Gonorrhœal Pyosalpinx in a girl of six years treated by removal of the tubes, by Mr. Leonard Bidwell.

A Case of Gonorrhœal Inflammation of the Uterine Appendages in a girl of three years, with spontaneous recovery, by Dr. George Carpenter.

A Case of Post-hemiplegic Chorea, petit mal, and Mental Irritability treated surgically, by Mr. R. C. Dun (Liverpool).

Two Cases of Strangulated Hernia in Infants under one month, treated by operation, by Mr. Leonard Bidwell.

A SPECIAL MEETING was held on Friday, May the 20th, at 5.30 p.m., at 11, Chandos Street, W., Mr. WATSON CHEYNE, C.B., F.R.S., in the chair.

A Case of Congenital Dilatation of the Colon in a boy six years old was shown by Dr. GEORGE CARPENTER. The child had suffered from chronic constipation since its birth, and its abdomen had increased in size from the time it was a year old. The child was ruddy looking, but thin, and with somewhat pinched features. The abdomen, which was very large and tympanitic, measured twenty-seven inches in circumference, and large coils of moving intestines were plainly visible under the abdominal walls. The case was shown to obtain an expression of opinion as to the advisability of surgical interference, if any, and if so as to what form it should take.

Mr. WATSON CHEYNE was in favour of simple colotomy.

Delayed Chloroform Poisoning.—Mr. HAROLD J. STILES (Edinburgh), and Dr. STUART MCDONALD (Edinburgh) (introduced) contributed a paper on this subject. Mr. Stiles, in his introductory remarks on behalf of himself and Dr. McDonald, said although the occurrence of delayed

chloroform poisoning had long been recognised in Germany, Dr. Leonard Guthrie, a fellow member of the Society, was the first to direct attention to the subject in this country. His first paper, published in the 'Lancet,' vol. 1, 1894, was entitled "Some Fatal After-Effects of Chloroform in Children." In a second paper, published in the same journal, July the 4th, 1903, Guthrie brought forward further observations in support of his contention that the fatty changes met with in delayed chloroform poisoning are not due to the action of chloroform alone; he maintains that the liver is in an advanced state of fattiness previous to the administration of the chloroform, and that the latter, by diminishing oxidation, already deficient, determines the state of functional inadequacy which sets up an auto-intoxication due to the accumulation of ptomaines or toxines.

Mr. Stiles then described the clinical history and pathological changes in two children who died, the one three days after operation for the radical cure of hernia, the other twenty-six hours after an osteotomy for knock-knee. The symptoms and post-mortem guidings corresponded closely with those described by Thiem and Fischer, Bastianelli, Fraenkel, Guthrie, Ambrosius, Steinthal, Bandler, Marthen, Heintz, Salan and Wallace, Dorner, Cohn, and Foester. It was shown that death could not have resulted either from carbolic acid poisoning, from fat embolism, or from sepsis. In the osteotomy case the fat emboli in the lungs were only present in the smallest vessels, and were so scarce that death could not be attributed to them. It was interesting to note that some of the sub-lobular and hepatic veins contained a considerable amount of oil, for the most part in free droplets, but occasionally in the interior of what were evidently disintegrated liver cells. No fat was demonstrated in branches of the hepatic artery, nor could any be discovered on the aortic side of the circulation. It was evident, therefore, that the fat in the lungs was derived from that which had gained access into the hepatic veins from the disintegrated liver cells.

The possibility of sepsis was carefully considered. Lantern slides and microscopical specimens (obtained from a child who died from a gangrenous inflammation of the œsophagus following operation for perityphlitis) were demonstrated to show how closely the degenerated changes in the liver, kidneys, and heart resembled those which are said to be characteristic of delayed chloroform poisoning. In neither condition were there any inflammatory changes in the glomeruli. The fact was emphasized that the same degenerative changes are sometimes present in patients who have died after operations for septic conditions, especially of abdominal origin, as are found in patients who have died from delayed chloroform poisoning uncomplicated with sepsis. In cases in which a septic element exists the difficulty is to say how far the degenerative changes are due to bacterial toxæmia, and how far to an auto-intoxication determined by the chloroform. The question can only be settled by comparing the morbid changes found in the liver, kidneys and heart in patients who have died after operation (chloroform anæsthesia) from an acute infective surgical disease with those present in patients who have died from similar conditions without having undergone any operation, or who have been operated on under ether anæsthesia.

The hope was expressed that pathologists would inquire more closely into the nature and causation of the degenerative changes to be found in the above-mentioned organs in surgical cases.

Out of 3000 operations performed under chloroform in the in-patient department of the Royal Edinburgh Hospital for Sick Children during the past five years there was the strongest evidence to show that three deaths

(possibly four) were due to the after-effects of chloroform. Unfortunately the pathology and symptoms of delayed chloroform poisoning have, up to recently, been either overlooked or wrongly interpreted, so that the mortality cannot be estimated until the condition has become generally recognised by surgeons and pathologists. With one exception the cases recorded in this country have all occurred in children while under treatment either in the Paddington Green Children's Hospital, or in the Royal Edinburgh Hospital for Sick Children, these being two hospitals where special attention has been directed to the condition. In Germany, on the other hand, almost all the reported cases have been in adults, and the greater proportion of these have occurred after a somewhat severe operation for infective abdominal conditions, such as suppurative salpingitis, appendicitis, etc. The element of sepsis with which these cases are complicated render it difficult, in the present state of our knowledge, to say how far they help to solve the problem of delayed chloroform poisoning. If it could be shown that the critical condition (persistent vomiting of a more or less hæmorrhagic type; small, rapid, and often irregular pulse; extreme restlessness, collapse, etc.) in which we occasionally find patients forty-eight hours or so after operation is in any way brought about by degenerative changes set up by the chloroform, the question of substituting ether will have to be seriously considered even in the case of children. Unfortunately, however, the mortality in children from the effects of ether on the respiratory tract would probably be as great, if not greater, than that due to the after-action of chloroform.

Details were given of six out of fourteen experiments performed on rabbits to ascertain the effect of chloroform on the tissues. In Experiments 1 and 2, 2 c.c. of chloroform were injected into the subcutaneous tissue, while in Experiments 3 and 4, 3 c.c. and 4 c.c. of ether were injected respectively. Both the animals injected with chloroform died on the fourth day after the administration of the drug. The liver was extremely fatty, and to a less extent the kidneys and heart. There were numerous petechial hæmorrhages in the gastric mucosa, a point of considerable importance, since it has been shown that hæmorrhagic vomiting is one of the most important and constant symptoms of the delayed toxic action of chloroform. Both the animals injected with ether recovered, and the post-mortem examinations revealed no fatty degeneration or other abnormality. Two experiments were performed on rabbits with the object of determining the action of chloroform on the liver, the drug being administered by inhalation in the ordinary way. As control observations, and in order to determine the condition of the liver at the time of operation, the experiments were begun by excising a small piece of liver under ether anæsthesia. A week later the animal was deeply anæsthetised with chloroform in the usual way for twenty-five minutes. The animal recovered, and was killed forty-eight hours after the administration. The piece of liver removed at the first operation (ether anæsthesia) showed a few small oil globules here and there; many fields, however, were entirely free from fat. The same liver examined, post mortem, after chloroform anæsthesia showed an extensive fatty change in the intermediate and central zones of all the lobules, thus corresponding exactly with what was found in the two children who died from delayed chloroform poisoning. The kidneys showed distinct cloudy swelling of the convoluted tubules, and here and there a distinct fatty change. The heart was not fatty. The sixth experiment was conducted on the same lines as the above, and gave similar results.

In discussing the causation of delayed chloroform poisoning a case was

instanced which favoured the view held by Guthrie. It was that of a boy who died on the fourth day after the administration of chloroform for the purpose of examining a stiff knee-joint secondary to syphilitic disease of the lower end of the femur. It was observed that the liver was considerably enlarged before the anæsthetic was administered. No incision was made, nor was any attempt made to forcibly straighten the limb. The patient came well out of the anæsthesia, but was very sick the whole day. On the day following the vomited matter was distinctly coffee-ground, and this persisted until death. At first the patient was very restless, but subsequently he became more and more collapsed, and died in a semi-comatose condition. The liver and kidneys showed the same fatty change as occurred in the two cases of delayed chloroform poisoning above described. So long ago as 1860, Symonds, of Oxford, drew attention to the danger of chloroform in patients suffering from fatty liver.

It was not thought that Dr. Guthrie had brought forward sufficient evidence to show that the fatty change here described is the essential predisposing factor, and that the chloroform merely acts as the "last straw." It was thought much more probable that the fatty change was entirely due to the chloroform acting on a previously healthy liver; indeed, experimental evidence seemed to give strong support to this possibility. Moreover, while the changes in the liver are so striking it must not be forgotten that other organs give evidence of a general toxic poisoning, and it seems hardly justifiable, therefore, to attribute the fatal result to hepatic insufficiency. Fatal cases of delayed chloroform poisoning are undoubtedly very rare, and it would appear, therefore, that idiosyncrasy is the main factor in their causation just as it is in the irreducible minimum of deaths which occur during chloroform anæsthesia. As regards the treatment of delayed chloroform poisoning the authors entirely agree with Guthrie in strongly condemning the use of morphia. Rectal and subcutaneous injections of normal saline solution and, if necessary, intravenous injections must be employed. If the vomiting be copious the stomach should be washed out, and an endeavour should be made to get it to retain some calomel or grey powder. Cardiac stimulants must be used, but in moderation.

The Chairman (Mr. Watson Cheyne), in the name of the Society, thanked Mr. Stiles very much for the most admirable address which he had given them, and for calling attention to these peculiar cases. He had to confess, however, that he was still not quite convinced that the chloroform was the only causative factor in these cases, and that they must be looked on as after-effects of the administration of that anæsthetic. Although he had had two or three cases at Paddington Green Children's Hospital, Mr. Cheyne thought it very remarkable that he had never met with similar occurrences either at King's College Hospital or in private practice. The extremely short administration in some of the cases, for example, tenotomy, and the minute dose administered, made it very difficult to believe that the chloroform was the cause of the fatal result. He would await the publication of the paper and the possibility of studying the facts more carefully in detail with the greatest interest.

Dr. Leonard Guthrie thought that the frequency of these fatalities following operations under chloroform upon children might be greater than was indicated by the number of cases recorded in this country. Ten years previously he had published in 'The Lancet' a series of ten cases, nine of which had happened at the Children's Hospital, Paddington Green. Since then, three more had occurred at the same institution. He doubted whether

such experience was unique. Possibly a search in the archives of other children's hospitals might reveal more cases of a similar nature. He did not believe that they were attributable to septic infection of operation wounds. Yet the symptoms, which resembled those of acute yellow atrophy of the liver, pointed to toxæmia of some kind. The view that fat embolism was the cause of death did not accord with the symptoms, pathological findings, and nature of the operations. The case against chloroform was that prolonged and repeated inhalation of that anæsthetic produced in animals profound fatty changes, not only in the liver but in the kidneys and other organs, and that such changes were almost constantly found in children dying in the manner described after operations under chloroform.

But on the other hand it was difficult to conceive that such extreme fatty changes could be induced by the small amounts of chloroform absorbed during a period of anæsthesia which in some cases did not exceed a quarter of an hour or twenty minutes. Hence he inclined to the view that a fatty condition of the liver was pre-existent at the time of operation in such cases, that chloroform by its deoxidising powers aggravated and intensified the fatty changes present, and thus rendered the liver incapable of dealing with toxins entering the portal system from the intestines. The result was that such toxins passed into the general circulation and could not be eliminated on account of the specific action of the chloroform on the kidneys. The rôle of the chloroform was therefore that of the "last straw." The existence of such fatty livers might be suspected though it could not be proved by the history of so-called "bilious attacks," characterised by vomiting, headache, epigastric pain, diarrhœa, or constipation, associated with the odour of acetone in the breath and urine.

When such a history was obtained, ether should be the anæsthetic used, as experiments on animals showed that ether possessed the power of inducing fatty changes to a far less extent than chloroform.

Dr. Hewitt (introduced) had never seen any cases at all comparable to these. He supported Dr. Guthrie's request for an inquiry, on account of the extreme importance of the subject to the profession. He wished to ask Mr. Stiles what method of giving the chloroform had been employed, because, although most improbable in these instances, he thought that sometimes acute infections obtained access to the body by chloroform inhalation. He suggested that one of the children's hospitals change its customary anæsthetic for one or two years to a mixture of chloroform and ether, in order to observe the results.

Mr. Burghard remarked that in one of Dr. Guthrie's cases at Paddington Green, on which he had operated, the notable thing was that death occurred after the *second* time of operating. The case was one of a very large nævus of the chest and arm, and the first operation, which had taken place several weeks before, was much the longer and more severe of the two; nevertheless the child recovered without a symptom of any sort referable to chloroform administration.

Dr. Silk (introduced) confessed that he had been very sceptical with regard to Dr. Guthrie's first paper ten years ago; he was now very astonished to find that it had been discovered in Edinburgh, of all places, that quite possibly chloroform might produce some ill-effects. He commented on the occurrence of the condition only in older children, in spite of the fact that chloroform was given to very large numbers of infants. It was strange also that no relation could be established between the size of the dose administered and the production of the condition. He considered that,

in Mr. Stiles' experiments, 2 c.c. subcutaneously was too big a dose for an animal weighing three pounds, and was not surprised to hear of their succumbing; that was not a fair test.

Mr. Noble (introduced) had administered two of the anæsthetics in Dr. Guthrie's cases. Perhaps these cases were commoner than was usually supposed. He now thought that two deaths he witnessed at Great Ormond Street, when house surgeon there, were probably due to this condition.

Mr. McCardie (Birmingham) (introduced) had never seen a case, although he remembered the death of a patient on the fourth day after similar symptoms; however, no autopsy took place. Froster had described two cases of parenchymatous degeneration due to chloroform administration, and showing slight albuminuria, vomiting, and collapse before death. The first case died on the second day, and the second, a girl of eleven, on the fourth. Fatty changes were found in the heart, liver, and kidneys. That author lays stress on the kidney lesions, especially on the fact that they were more advanced in the tubules than in the glomeruli, which was a diagnostic feature. He wondered whether such conditions were more apt to occur in lymphatic children, as they stood most adverse influences worse than other children. The moral was to always use ether in children.

Mr. Stiles, in reply, said time did not permit of his going into the literature on the subject. What had struck him most about the German cases was that the majority were reported from gynæcological clinics, and occurred after operations for septic conditions within the abdomen. The possibility of a severe septic intoxication in these cases was so great that it was doubtful how far it was justifiable to attribute the deaths to delayed chloroform poisoning. He deprecated the practice of examining gynæcological cases under chloroform for diagnostic and demonstrative purposes, and then giving the drug again a day or two later for the operation. He advised that careful autopsies and microscopical examinations should be made in all cases in which there was any doubt as to whether the patient had died from sepsis or from delayed chloroform poisoning. It was important also to compare such cases with those in which death had occurred from septic disease without operation. He inclined to the belief that two factors were often at work, viz. a bacterial toxine and the chloroform.

In answer to Dr. Silk, he suggested that delayed chloroform poisoning might easily be overlooked in infants who had undergone minor operations such as circumcision, etc., because such cases were invariably treated as out-patients.

With respect to the experimental dose, he did not consider that the injection of 4 c.c. was excessive, although this amount was purposely employed to bring out the full action of the drug on the tissues.

Editorials.

THE CARE OF INFANTS IN WORKHOUSES.

Our hope of lowering the infant mortality of the future lies chiefly in the diffusion of a few elementary principles of hygiene amongst

the poorer classes. We refer, of course, to such questions as the importance of breast feeding, the use of proper bottles, the non-contamination of milk, and more efficient ventilation. Children's hospitals are important centres for the diffusion of such knowledge, but they often do not reach the very poor, whilst, in any case, their field is a comparatively restricted one. The workhouse nurseries, which exist throughout the country, offer unique facilities for the inculcation of these fundamental and simple principles. We feel sure, after a perusal of the Dietary Order of 1900, that the Local Government Board had some idea of this possibility when they included in that order a special proviso to direct that "the medical officer" of the workhouse "shall give directions in writing as to the service of food to the infants."

We gather, however, from inquiries we have made in several quarters that the medical officer very rarely carries out these directions.

We are at a loss to understand why this is so, unless it be the fact that the average medical officer cares little as to how the young children in the workhouse are fed, and is wholly apathetic as to the effect of his remissness on the national welfare. This neglect of his duties is all the more deplorable when it is realised that a very large number of children and their mothers pass through the workhouse nurseries of the country every year, that they come from the residuum of our population, and that the majority of the children are suffering in one way or another from semi-starvation or diseases incidental to improper feeding.

Very rarely have the mothers, or even the officers who have charge of the nursery, any knowledge of how to feed infants properly.

We do not blame the lay officers for this want of knowledge, for the simple reason they have never been taught, but we cannot hold the medical officers guiltless. They legally are responsible, and they shirk a responsibility which should not require a legal direction to remind them.

So much for the capital question of infant feeding. We feel that in other directions also our workhouse nurseries neither obey the latest dictates of scientific hygiene, nor attempt to instruct the mothers who constitute such a large part of their floating popula-

tion. Does the ventilation of any one of these nurseries at all approach the standard necessary for health? Is any attempt made to show parents the danger of overlying? It is an open secret that in high quarters the cot system is not only not extolled, but even condemned. This is entirely out of harmony with all expert opinion on the subject. We need not here go into the old arguments as to whether the warmth of the mother can be given by artificial heat, or as to the dangers from the child breathing vitiated air under the bed-clothes, but that the risk of overlying is a very real one needs only a slight experience of coroners' courts to establish. We repeat that for any institution to deny the efficacy of the cot system is to prove itself out of date in modern hygiene.

The above charges are grave ones, but we fear that they are only too well founded. We consider that such questions of national importance should no longer be overlooked by those in authority, and we call for investigation into a matter that to us seems to require urgent reform.

THE NOMENCLATURE OF TUBERCLE.

We wish to dwell shortly on this interesting subject. When the word "tubercle" was first commonly employed in medicine, in the decade 1820—1830, it was used simply in its literal meaning of a "little wart," and all derivatives of the word had a similar reference. When, however, the specificity of the commonest lesion in which tubercles were found—pulmonary consumption—was demonstrated, confusion was introduced into this nomenclature. For fifty years the word was used by some writers in its original meaning, by others in its acquired meaning; but as time went on the latter became more and more the accepted one.

At the present day the word "tubercle" refers in medicine to nothing but the specific infective process known as tuberculosis. Similar definition of meaning has not, however, yet been arrived at in certain derivatives of the word. Of late years the leading writers, perhaps influenced by a decision on the point by the Royal College of Physicians, have employed the word "tuberculous" as an adjective

designating "pertaining to the process tuberculosis." The older word "tubercular" has, then, no official recognition, and the question arises whether it should be discarded altogether or its meaning defined, perhaps in a new sense. It would be obviously wasteful to employ it as synonymous with "tuberculous," and this has, so far as we are aware, not been advocated, so that we are left with the above two alternatives. The second of these has been already utilised in a suggestion, emanating, we believe, from St. Bartholomew's Hospital, to the effect that we should use the word in its original sense of "pertaining to a little wart." In that case instances where this original meaning has still lingered on, as for example "tubercular syphilide," would be accepted as correct; one would also speak of leprosy as being a "tubercular" disease, though not a "tuberculous" one. This suggestion, if carried out, would give us a new word of some slight value; it would, however, be apt to lead to confusion in expression, for the reason that "tubercular" would be the only one of the many derivatives of the word "tubercle" artificially divorced from the harmony of usage which the other derivatives enjoy. On etymological grounds we have the high authority of Professor Skeats on our side when we condemn such a rendering as untenable.

We think that consideration of the usual grounds on which the termination "ar" is employed should guide us in deciding the question. First let us take as an analogy any word, say "popular," which has a similar termination. We see at once that the word "popular" means "pertaining to the populace," as in the terms, "a popular demonstration," "a popular opinion," while "populous" means "populace containing," as in the term a "populous city." Proceeding on these lines we propose that "tubercular" mean "pertaining to tubercle"—the word tubercle being used in its accepted and unequivocal sense—and that "tuberculous" have a more exact meaning as signifying "containing tubercle." We would thus speak of a tubercular patient and tubercular diathesis, but of a tuberculous lung (provided that the specificity of the lesion had been demonstrated, as by discovery of the bacillus).

Excerpta Puerilia.

Eugenics.—At the second meeting of the Sociological Society held on May the 16th, with Professor Karl Pearson in the chair, Professor Galton read an interesting paper on this subject. A discussion took place afterwards, in which several eminent authorities took part, either personally or by correspondence. There was complete agreement as to both the importance of the question and as to ignorance of the public in regard to it. Even if far-reaching conclusions were to be reached by scientists, they could have no practical results until public opinion had been gradually educated. The obvious teachers are the great body of the medical profession, and it seems to us that no headway will be made, either in that or any other subject bearing on heredity, until our profession takes more interest in what they now contemptuously dismiss as a question of scientific and therefore theoretical interest only.

Meals before Lessons.—Islington is demanding that the local authorities should be given power to feed underfed school children. Something of the kind has been urged by certain municipalities before, but not being directly interested, as they are now, in the management of the schools, little has come of their representations. This brings some of us back to our early school days—the getting up in the morning at 6.30 a.m., and the prospect of the hour's preparation of lessons before breakfast. We have a lively recollection of our youthful gastric experiences, and of the difficulty in concentrating the attention on intellectual matters not always of interest to the youthful mind, with gnawing vitals and cold feet. For some of these poor Board School mites it must be difficult for them to remember when they had the last square meal, and the hopelessness of teaching them under such adverse and brutal conditions must be apparent to all. How or by whom these children should be fed are matters which does not concern us ; what we are interested in advocating is that the child should be fed before it is taught. The authorities can well be left to arrange the details. Islington is by no means a pioneer in such matters. The East Lambeth Dinner Association, supported by voluntary contributions, for now some fifteen years has presided over the welfare of some 45,000 children in Walworth, Newington and Camberwell occupying some eighty schools. The association has also been aided by the London Schools' Dinners

Association, a central body which assists all other similar local London societies. When the School Board was in existence the recipients of the charity were selected by a committee consisting of a teacher, a manager, and a visitor. With the dissolution of the London School Board, the work has to be revised by the County Council and the Borough Councils, hence the well-timed action of Islington in the matter, which we hope to see taken up by other local authorities.

Clitheroe school children to be medically examined.—Clitheroe, a Lancashire town possessing a population of some 12,000 inhabitants, is to be congratulated on its progressive policy. It has been decided, according to the 'Nottingham Guardian,' and by the casting vote of the Mayor, that the eyes and teeth and hair of the school children shall be examined once a quarter by the borough medical officer, who is to visit the schools for the purpose. But why omit other regions equally vulnerable? The condition of the posterior nares is not unimportant, especially in relation to tuberculous glands, not to mention other things, nor should the ears be neglected. The feet should certainly not be overlooked at these inspections. How often does neglect in this respect lead to suffering and disease? Boots too small for the feet, with consequent distortion of the joints, and boots that are worse than no protection at all to the feet by reason of their unsoundness. These are matters which should also compel the attention of the Councillors, and while they are in the mood to give their commands they would be well advised to have a thorough medical examination made of the scholars under their charge, both physical and psychical. The ability to conduct such examinations as the Clitheroe Councillors have determined upon with success requires very special training, and implies no small amount of skill, erudition, and technique, not to mention expenditure of time, such an amount in fact that even a Clitheroe Town Councillor might feel proud were he the possessor of such accomplishments as would pilot him safely through such an ordeal. Have the Councillors, who appear to be fairly intelligent and certainly well-meaning people by the action they are reported to have taken in respect to this matter, an idea of the length of time it would take to conduct such examinations if even moderately good results are to be looked for? Have they a notion of the training that is required to undertake them? Apparently not, for we find that the remuneration offered for these by no means light duties is the princely sum of £15 per annum. Nor can the medical profession be held altogether free from blame for such a lamentable state of affairs as is evidenced by the above municipal

generosity. It has been the custom for many years past for medical men to give their sevices to the public on the slightest provocation, often indeed without any provocation. As the public only values that for which it is accustomed to pay, it has come about that, in return for all this indiscriminate medical charity, when the time arrives for the public to show its appreciation for services voluntarily bestowed, a wholly inadequate remuneration is offered for the discharge of important public duties, the importance of which the public would not have realised had it not been for the teaching of medical experts. If the work is to be conscientiously performed by the borough medical officer it would necessarily entail a considerable sacrifice of time and consultations with experts in such matters. On the other hand, if the officer in question is to view his duties from the standpoint of the amount of the remuneration offered, it would result in a quarterly march past of the children of the various schools, notice only being taken of the more glaring abnormalities, defects which could not be overlooked by the man in the street. It would be advisable for the town councillors of Clitheroe to reconsider the matter of remuneration, or cease to pose as pioneers of school hygiene.

Physical training in the primary schools.—A report has recently been issued upon the suitability of the model course of physical training used by the Board of Education. The Committee has arrived at the conclusion that the "model course" is not suitable for use in schools. The so-called "Swedish exercises" have been more or less widely taught in England during recent years, and the sets of exercises recommended by the Committee seem to be formed on the Swedish pattern. It is recommended that drill-sergeants should no longer be employed as conductors of the physical education of girls, but that their place should be taken by "women of good education who have undergone a systematic course of preparation for becoming instructors in physical exercises." Anyone who has had an opportunity of seeing a class of girls going through their exercises under the direction of a lady instructor will fully appreciate the wisdom of this decision. Not only are the exercises designed to bring into play every muscle of the body and correct defects of deportment, but the lady instructors take an intelligent interest in their work, which is indeed the work to which they have decided to devote their lives. The Committee, however, has not limited its report to the subject of physical exercises which bear chiefly upon muscular development and its influence on the figure. It is directed that breathing exercises

should also be practised, and that it is not increase of chest capacity which should be mainly aimed at, but increase of power both to expand and empty the chest. In connection with the value of the various forms of exercise it is pointed out that since exercise of vigorous character increases the demand for nutrition, some badly-fed children are not likely to profit by them. There are also children who from some constitutional weakness might even suffer injury. In connection with the subject of the presence of defective children and the teachers' recognition of deviation from normal standards the following wise remarks are made :—"That suitable instruction in the laws of health and in the outward signs of physical and mental weakness should receive a much more prominent place in the general scheme for the training of teachers than appears to have been the case hitherto. For this purpose no mere bookwork instruction such as may be necessary for passing written examinations in physiology and hygiene is sufficient. The instruction should include a certain amount of, so to speak, clinical experience. The students should be made acquainted practically with the indications of normal health and normal physique, and taught how to recognise probable deviations from this standard. They should be able to recognise such signs of defective nutrition and such defects of sight, hearing, and breathing as require medical attention. They should also be familiar with the signs of fatigue, physical or mental, which to the experienced teacher are the gauge on which he keeps his eye in regulating the work of a class."

The provincial meeting of the Society for the Study of Disease in Children.—The provincial meeting of the Society will be held at Bristol on Saturday, June the 18th. The meeting will take place, under the presidency of Dr. Theodore Fisher, at 4 p.m. in the Medical Library of University College, which is close to the Children's Hospital. Prior to the meeting, from 2.30 to 3.30 p.m., cases will be shown in the wards of the hospital by the medical and surgical staff. Those desirous of reading papers or showing cases or specimens at the meeting should communicate with Dr. George Carpenter. This privilege is not confined to members of the Society, but medical men, if introduced by members, can read papers, exhibit cases, and take part in the discussions at the meeting if due notice be given ten days beforehand. The dinner will be served at the Clifton Down Hotel at 7.30 p.m. for members and their friends. Those desirous of attending the dinner should communicate with Dr. Theodore Fisher, Harley Lodge, Clifton Down.

Abstracts from Current Literature.

Surgery.

Torsion of the spermatic cord and hæmorrhagic infarct of the testicle.—**Lapointe,** in a monograph on this subject (Paris, 1904), reviews thirty-seven cases recorded in the literature, inclusive of one which he had under his own care. In this case the symptoms closely resembled those of orchi-epididymitis, only the absence of any inflammatory condition elsewhere in the genital apparatus and the sudden onset pointed to the true nature of the lesion. Three of the collected cases were examples of the less common type in which the spermatic cord and its coverings are twisted above the level of the tunica vaginalis. This form is called by the author "bistournage accidentel," the lesion being the same as that which veterinary surgeons designedly produce in animals. In two of the cases the testicle was in the inguinal region, in the third it was in the normal scrotal position. The condition which predisposes to the usual type, where the torsion is of the testis within the tunica vaginalis, is an abnormal formation of the mesorchium testis. The term mesorchium is, however, not a good one, for there is no true mesentery in the sense of a double form of serosa, the testicle being without a peritoneal covering at its hinder part. The torsion takes place between the visceral and the parietal attachments; the length of this uncovered area varies from 2 mm. to 8 cm. Torsion frequently depends upon incomplete development of the mesotestis, and is thus usually associated with imperfect descent and ectopia. With regard to the exciting cause of the torsion, in six of the thirty-four cases there was no history of strain or trauma; in these the writer believes contractions of the cremaster must be held responsible. The causes in the rest were lifting some heavy weight, sneezing, instrumentation of the bladder, straining at stool, jumping, falling; in one case only a local contusion. The lesion may be produced by a single half-turn of the testis, the vas deferens being twisted on the vessels. Effusion into the serosa usually occurs, but not always; the characteristic lesion is a hæmorrhagic infarct of the testis, a condition which very seldom occurs apart from torsion, but five such cases are recorded in the literature. The infarct becomes encapsuled and atrophies if it remains aseptic, but if infection occurs gangrene and sloughing follows; such infection may occur from the skin, from a neighbouring hernia, or by the blood-channels.

In regard to diagnosis, the point of most importance is the sudden onset of the testicular pain and its great severity; the symptoms may resolve by spontaneous correction of the torsion, and some patients who have had several attacks have learnt to replace the organ themselves. If the testicle is situated in the inguinal region, this will give support to the diagnosis. Therapeutically one of three measures may be undertaken: reposition by manipulation, reposition with operation, and castration. The first gives no guarantee against recurrence, and should be replaced by the exposure of the testis by operation and fixation, closing the tunica vaginalis without drainage. Castration is indicated if the testis is infected and situated in the inguinal region; hæmorrhagic infarct alone is not sufficient cause for castration.

KEITH MONSARRAT (Liverpool).

Jacksonian epilepsy in a child of two relieved by operation (' *Brit. Med. Journ.*,' *May* 14).—**H. Muir Evans.** The patient was a girl, aged two years and eight months. The fits were of two kinds—one, a sudden dropping forward of the head, and the other a severe convulsive movement involving the left side of the face, the left arm, and leg. Between the fits there was paresis of the left side of the face not involving the eye, and after a severe fit the paresis extended to the left arm. There was no optic neuritis. The fits first made their appearance when the child was seventeen months old. After the first fit the child was paralysed down the left side of the body. There was no history of any fall or injury, and no history of syphilis or hereditary tendency to epilepsy. The fits gradually increased in frequency, with occasional quiescent periods up to the time of operation. Medical treatment was quite ineffectual in controlling the fits. At the operation the skull was trephined over the ascending frontal convolution. On removing the bone the dura mater was seen to bulge into the wound; when this was incised, a cyst containing clear fluid and which closely resembled a mucous polypus was seen. After evacuating the cyst, the dura mater was sewn up and the wound closed. The fits entirely stopped after the operation, and the child appears to have made a complete recovery. P. Lockhart Mummery.

Congenital lymphatic cyst of the axilla (' *Deut. Aerzte Ztg.*,' *April*, 1, 1904).—**Max Schuller** records a case in an infant aged 2 days, who was born with a tumour in his right axilla. The tumour was of the size of a fist. The skin over it was healthy. The tumour as a whole was firm and resistant, but at some points the wall was soft and fluctuating. No pulsation was noted, and pressure produced no alterations in volume. A diagnosis of lymphatic cyst was made. The cyst was aspirated, and 150 gr. of clear, amber-coloured, alkaline fluid removed, which contained a large quantity of albumen. The cyst rapidly refilled. After being aspirated on several occasions it was finally incised. It was now found to be a multiloculated cyst with smooth, thick walls from which small septa projected. The bases of these were thickened, and felt like moderately firm gland tissue. There was no evidence of tuberculous or gummatous infiltration, nor of the presence of a new growth. The sac was washed out with sublimate solution and packed with guaiacol-iodoform-glycerine gauze. Complete recovery soon took place.

The fluid drawn off at first aspiration resembled closely the fluid which is obtained from the large so-called "hygromas" which are sometimes found in the neck. These cysts, however, have their origin in lymphatic vessels, whereas the cyst in the case above described was in relation to a lymph gland, or more probably a mass of glands. Cyst formation and hyperplasia must have occurred hand in hand, hence the large size of the cyst and the character of its walls. The rapid resolution which occurred after the operation negatives the possibility of a chronic inflammatory (tuberculous or gummatous) origin for the cyst, and still more of its origin in a sarcomatous or lymphomatous growth.

The writer is unable to offer a feasible explanation of the occurrence of the cyst. He believes that this curious condition must have existed from the moment of origination of the glands themselves. There may even have been some local source of irritation to produce the change. The suggestion of mechanical changes *in utero* cannot be maintained. E. P. Baumann.

Infective osteomyelitis; its pathology and treatment (*'Journ. Amer. Med. Assoc.,' February* 13, 1904).—**Nichols** describes a method of treating infective osteomyelitis which has for its object the shortening of the process of repair and the avoidance of sequestrum formation. In acute osteomyelitis he drains the lesion by trephining and joining the trephine holes with the chisel, but does not curette the central cavity, as he considers that unnecessary damage is done to the spongiosa thereby. Some weeks later—about eight in acute cases—he performs a subperiosteal resection of the affected diaphysis. The periosteum at this time has commenced the process of new bone formation, as can be easily demonstrated with a needle. The soft parts of periosteum are incised over the full extent of the affected part of the diaphysis, the periosteum is stripped with the raspatory, and the shaft is sawn or cut near the epiphysis, or wherever it may be necessary. After removing the shaft, the surfaces of the periosteum are disinfected with 95 per cent. carbolic acid, which is allowed to act for two to three minutes, and then washed off with alcohol. The surfaces of periosteum are then carefully brought into apposition with sutures and the soft parts united, drainage being provided for at several points. To avoid loculi where fluid might collect the extremities of the bone left may be levelled off; the greatest care must be taken not to encroach on the epiphyseal line. This is the procedure when the bone operated on is supported by another, as the tibia is supported by the fibula. In other cases it is necessary to wait longer, until the development of the new periosteal bone has sufficiently progressed to retain the proper form; about sixteen weeks are usually required for this. The operation is similar to the last, but it is necessary to remove the affected shaft piecemeal. In old-standing cases, when a loose sequestrum is present, the periosteum of the case is similarly peeled off and afterwards sutured. In such cases the medulla is filled with necrotic bone, which must be chiselled away, otherwise pseudarthroses may form and the process of healing be very prolonged. The writer demonstrates a number of cases, which appear to show that both functionally and anatomically very good results are obtainable by this method.

KEITH MONSARRAT (Liverpool).

Topographical anatomy of the crypts of hypertrophied tonsils (*'Journal de Médecine de Paris,' March* 13, 1904, *p.* 110).—**A. Courtade** contributes an important article on this subject. He first reviews our present knowledge of it, and quotes the various text-books. He then gives the result of his careful investigations in children with the methods he has employed. He concludes that:—The number of crypts is higher than usually stated; their direction is not vague, for, if prolonged, they would all meet at a common centre situated external to the tonsil and at the level of its middle; the large orifices seen on the internal aspect of the tonsil represent the common openings of several crypts, which are often very shallow; the crypts are as numerous in the two extremities of the tonsil, where one rarely looks for them, as in the centre, and are deeper in the extremities; the deepest crypts most often have the smallest openings. The clinical bearings of the work done are considered in detail.

A. ERNEST JONES.

The necessity for supplementary measures after the removal of adenoids (*'Archives of Pediatrics,' April*, 1904).—**Percy Fridenberg** draws attention to the great importance of the after-treatment in cases of adenoids if a favourable result is to be expected from the operation, and if a

recurrence of the adenoids is to be prevented with any degree of certainty. Special attention should be paid after the operation to teaching the child nasal breathing. The use of respirators and other means to prevent mouth breathing at night, and regular respiratory exercises are also advocated. Another detail which he considers important, is the careful correction of any malformation of the teeth or alveolar arch. Such malformations are frequently present, and if the facial expression is to be materially improved it is important that they should be corrected. P. Lockhart Mummery.

Lip-tie (*'Annals of Surgery,' March*, 1904).—**Frederick Griffith** describes a condition of the lips similar to that which is known as tongue-tie, to which he gives the name of lip-tie. He describes the case of an infant in whom this condition was well marked in the upper lip. The under surface of the upper lip was adherent in the middle line to the gum by a fold of tissue which was continuous with the mucous membrane of the mouth. This band of tissue was about an eighth of an inch thick and formed a frænum to the upper lip. When the child opened his mouth the upper lip was rolled inwards, causing a peculiar expression of the face. Treatment consisted of snipping the band with blunt pointed scissors. He points out that this condition may also occur in the lower lip. P. Lockhart Mummery.

Congenital elevation of the scapula (*'Sbornik Klinicky,'* 1904, *p.* 73).—**Maydl,** in relating two cases of this deformity, discussed the etiology and treatment of the condition. The first case was a girl aged 13, who presented the deformity on the left side in its typical form as described by Sprengel; Maydl found that from the vertebral border of the scapula a stout bony process extended to the cervical vertebral column, and that this process was responsible for the limitations of movement of the left arm. A skiagram confirmed this observation. The operation which followed showed that a bony process, embedded in the muscles, extended from the fourth cervical vertebra, and by means of a cartilaginous peripheral extremity was attached to a bony outgrowth from the inner border of the scapula. The whole process was extirpated, and in doing so the vertebral canal was opened and the dura was injured. The patient made a good recovery, and left the hospital a month later, when the movements of the arm were entirely normal in range. The second case was that of a child aged 10; the deformity was also left-sided and identical with that discovered in the first; the bony process was here again removed, and the movements of the arm restored to their normal limits. Maydl considers that this bony process is the true cause of this deformity, and that it is probably always present, though in some cases it may be difficult of detection; probably in some cases it is only in part ossified or entirely cartilaginous. The point of articulation with the scapula was on the inner border at the level of the inner extremity of the spine, or it may be slightly above or below this. The elevated position of the scapula present in these cases is the normal situation at the end of fœtal existence; after birth the bone descends somewhat; the presence of an ossified process, as in these cases, interferes with this descent, and limits the movements of the scapula. Extirpation of the process is the proper treatment. Keith Monsarrat (Liverpool).

Appendicitis in children (*'Med. Rec.,' New York, April* 30).—**John W. Brannan** in a paper on this subject advocates prompt surgical treatment in cases of appendicitis in young children. He thinks that the

diagnosis of the condition of the appendix in children is very uncertain, and that more harm is done by delaying operation than by prompt surgical interference. He puts forward the view that the present high death-rate of appendicitis in children, which he gives as 25 per cent., is largely due to operation being postponed too long. P. Lockhart Mummery.

Medicine.

Serum therapy and scarlatinal streptococci (' *Soc. de Biologie*,' *May* 14, 1904 ; ' *La Presse Médicale*,' 1904, *p.* 320).—**Dopter** gives the results of his researches. He finds that the serum of scarlatina patients can agglutinate the streptococci not only of scarlet fever, but also of septicæmia, erysipelas, etc. Again, the serum of patients suffering from streptococcic angina, erysipelas, etc., can agglutinate the streptococci of scarlet fever. These facts make him reject the specificity of the latter streptococci, and he concludes that they are only a secondary infection in scarlet fever.

A. Ernest Jones.

On the nature of some forms of continued fever in infants (' *Riv. di Clin. Ped.*,' *November*, 1903).—**G. Mya,** in order to explain lengthy febrile attacks during infancy, lays stress on the hyper-thermophilia which is a special characteristic of early age, and is especially marked in subjects of inherited arthritic, syphilitic, or tuberculous diathesis. Attention must be given to latent febrile causes peculiar to infancy, such as infection of the bladder by bacillus coli and a permanent infective state of the pharyngeal lymphatics. A useful rule is to rid oneself of the inveterated tendency to attribute to fevers of unknown nature a gastro-intestinal origin, bearing in mind that in infancy the symptoms of alimentary infection and intoxication are usually very evident fairly early, although they may be uncertain at the commencement of the illness. The most frequent cause of febrile attacks without distinctive symptoms, for which it is impossible to find any well-marked cause, is latent tuberculosis, which is very frequent in children, and is as often capable of being arrested when suspected in time. Obsolete tuberculous foci, which are found at autopsies of adults, have often had a corresponding febrile period during their phase of development and subsequent arrest, and the most fatal error that can be committed in similar cases is to persistently diagnose an intestinal affection, and to enforce an unsuitable diet, which keeps up a state of relative inanition and facilitates the attacks of the tubercle bacillus. In any obscure case of fever in infancy every method of research should be undertaken to investigate the cause, and having excluded all gastro-intestinal infection and the possibility of typhoid, of dysentery, gastritis and enteritis of pyogenic origin, a nutritious diet should be prescribed, notwithstanding the fever, as being the best means to counteract the perils of a latent tuberculosis.

Vincent Dickinson.

A case of spleno-pneumonia—Grancher's disease—in a child of three years (' *La Pediat.*,' *October*, 1903).—**N. Fedele** describes a case of spleno-pneumonia—Grancher's disease—in a child of three years. The pathology of this affection is not known; it is a disease of gradual origin attacking adults or infants, preferably males, and the left lung, always terminating favourably, and following influenza, albuminuria and tuber-

culosis. In this case there was slight dyspnœa, troublesome but not violent cough, slight fever, impaired movement of left side, abolition of vocal fremitus, no difference of volume of the two sides, posteriorly complete dulness on left side from base to scapular angle and in front as high as clavicle. Traube's semilunar space normal. Complete absence of respiratory murmur in left thorax and slight œgophony; no tubular breathing. Expectoration scanty, viscid, yellowish, containing Fränkel's pneumococcus. Improvement began on fifteenth day—fever ceased by twentieth, the lung eventually becoming completely pervious to air. This rare disease was first described by Grancher in 1883 and called spleno-pneumonia because the lung assumed the consistence of the spleen and is not to be confused with simple or broncho-pneumonia; it is essentially an albuminous phlegmasia of the pulmonary parenchyma, of protracted course, and which simulates the physical signs of pleuritic effusion, but it is distinguished by the persistence of Traube's space, absence of sternal displacement, absence of thoracic enlargement, and absence of displacement of abdominal viscera.

VINCENT DICKINSON.

School life and infectious disease (*'Canad. Journ. of Med. and Surgery,' March*, 1904).—**Charles Sheard** read a paper on this subject at a hygienic congress at Toronto. He is sufficiently radical in his proposals. "The mouth toy must be banished from the school; space and air and sunshine provided for the child in the school room; the teacher must be instructed and educated up to the point of recognising the indication of contagion in children; and the school children must be inspected by a competent medical inspector whenever contagious disease appears amongst the scholars." Apparently they have been able to take very thorough measures in connection with school children. "In Toronto, I am happy to say that, with the co-operation of the School Board, we have in the past been able to maintain the position that no child of a family wherein there has been contagious disease can be permitted to return to school without a certificate authorised and signed by the health officer. The ordinary contagious disease inspector has furthermore instructions to report instantly to the principal of the school where the child has attended, and must ascertain for himself that no members of the infected family are in attendance at school, and if such children are found so to be to remove them, and it is almost a daily experience that such supervision and constant watching is necessary." That this power of the health officer is not appreciated by the general practitioner is evident from the correspondence columns of the same journal, and it seems only reasonable that the physician who has attended the child in the illness should be recognised as the proper authority to decide when the patient is free from infection. As regards the proposal to educate teachers "to the point of recognising the indication of contagion in children," we should regard such teachers not as beginners in medicine but as masters in the art.

G. A. SUTHERLAND.

Perforating gastric ulcer in a young child (*'Reports of The Society for the Study of Diseases in Children,' Vol.* I, *p.* 143).—**J. Porter Parkinson** exhibited before this Society a specimen of a perforating acute gastric ulcer in a male child, aged 2 years and 2 months. He narrates that the child had suffered from gastric symptoms, vomiting, and slight fever for ten days, when suddenly there was hæmatemesis, followed by typical symptoms of acute peritonitis. The child died in sixty hours from the onset of the

acute symptoms. At the post-mortem examination a punched-out ulcer, with slightly thickened edges, and a perforation a little larger than a pin's head at its base, was seen near the centre of the posterior wall of the stomach. Another small ulcer was also present, close to the one that had perforated. The peritoneal cavity held about a pint of turbid fluid containing flakes of lymph. No trace of tubercle, which is the usual cause of gastric ulceration in children, could be found. Dr. Parkinson pointed out the rarity of the condition in children, and quoted Dr. Fenwick, who states that in all the records of the London Hospital there are only three cases reported, and in each case the gastric ulceration was obviously secondary to some other disease. JAMES E. H. SAWYER.

Spasm of the pylorus in infants (*'Soc. d'Obstetrique, de Gynécologie et de Pédriatrie,' May* 10, 1904).—**Mery** and **Guillemot** report three cases of marked gastric intolerance, with repeated vomiting, obstinate constipation, and alimentary stasis verified by stomach lavage. No treatment was of any avail until the children were put to the breast, either of the mother or of a wet-nurse. They attributed the symptoms to a spasm of the pylorus. In the discussion that followed considerable scepticism was expressed as to the frequency in England of the disease, called congenital hypertrophic stenosis of the pylorus. Lucas-Championnière, among others, said that spasm of the pylorus was often seen clinically, but that operation was unnecessary, as the condition yielded to medical treatment.

A. ERNEST JONES.

The treatment of new-born infants, children of syphilitics, though with no apparent syphilis (*'Soc. Obstet. de France,' April* 8, 1904; *'La Presse Medicale,'* 1904, *p.* 307).—**Keim** related the history of two children of a syphilitic man. They showed no signs of syphilis, but suffered from diarrhœa, vomiting, and loss of weight. This resisted ordinary treatment, but yielded to mercury. The author concludes that congenital syphilis, just as acquired, may be so attenuated as to show none of its typical manifestations, whilst yet producing severe symptoms, such as the above, which may even be fatal. THEODORE FISHER (Bristol).

On the "sublingual production"—Riga's or Fede's disease (*'La Pediat.,'' January,* 1904).—**N. Fedele** describes two cases.

Case 1, aged nine months, suckled, but after fourth month was given pap and unsuitable food, hence fever and vomiting and other signs of intestinal disturbance. Two lower central incisors cut at eight months, and shortly afterwards a swelling appeared under the tongue where the frenulum crosses the crest of the caruncle, the size of a large pea, pearly grey in colour, so that the infant constantly held its tongue out and dribbled saliva. No history of pertussis. After an appropriate diet and calomel and salol powders the general health improved, but the swelling remained, although causticked with pure carbolic acid and nitrate of silver; finally, it was excised and chromic acid applied, when after several months a cure resulted.

Case 2, aged eleven months; a similar history of injudicious feeding, two lower median incisors cut at seven months. The child had had whooping cough. After a month, although the general health improved, as the swelling remained, the incisors were removed, after which it disappeared as if by magic.

The author discusses the two main theories of causation, the infective and

the mechanical, and its relation to pertussis, enteritis, marasmus, and difficult suction, and agrees with Fede that the "sublingual production" is a papilloma and is dependent on mechanical conditions and usually traumatic irritation from the two lower central incisors. Even in malignant cases it has the same origin and cannot be regarded in the severe infective form as a manifestation of the infection which is rather of intestinal origin, and of which it is simply an accidental complication. VINCENT DICKINSON.

Suggestion during natural sleep (*'Société d'Hypnologie et de Psychologie,' October* 20, 1903).—**Wiazemsky** (of Saratow) has used Paul Farez's method of suggestion during natural sleep in the case of patients refractory to the more usual hypnotic procedures. He describes the cure of many troubles, such as nervous crises with loss of consciousness, paroxysms of motiveless terror, etc., in a hystero-epileptic. He has had a large experience of traumatic neuroses thus treated, in his capacity of medical officer to a Russian railway, and strongly recommends the method.

A. ERNEST JONES.

Respiratory spasm (*'Brit. Med. Journ.,' January* 16, 1904).—**Robert Fullerton** narrates a case of respiratory spasm followed by cessation of breathing in a recently born child. An apparently healthy infant, three days old, became cyanosed and ceased breathing. Artificial respiration was required to keep him alive as slowing and failure of the cardiac action also supervened. Recurrent attacks of this nature took place, lasting from fifteen to thirty minutes, occurring sometimes during sleep and sometimes when the child was awake. Laryngeal stridor was present at times. Temporary improvement followed the inhalation of oxygen, and the child seemed perfectly well between the attacks, but then recurrence necessitated tracheotomy, which was performed without difficulty. Six and a half days later the tube was successfully removed, after several preliminary attempts, which had led to a renewal of the spasm, and during the following six months there had been no recurrence of the symptoms. The exact condition present in this case is difficult to determine. Dr. Fullerton observes that the attacks differed from those of laryngismus stridulus, in being free from convulsions or facial spasms, in being prolonged in character, and in following each other in rapid succession without any apparent cause. The attacks were in some respects similar to those described under the title of "infantile respiratory spasm," or "congenital laryngeal stridor." The conclusion of the writer is that there was some powerful stimulus, or a peculiarly hyper-sensitive nervous organisation, or a combination of both present in this case.

G. A. SUTHERLAND.

Double, partial, alternating paralysis in a child of eight months, due to basal tuberculous masses (*'Société de Neurologie, December* 3, 1903).—**Lenoble** and **Anbineau** (of Brest) report the following unusual combination of paralyses in an infant 8 months old. A supranuclear paralysis of the facial nerve was present on the right side, combined with a left ophthalmoplegia. The ophthalmoplegia consisted in a non-action of the internal and inferior recti, possibly also of the superior rectus, in the left eye, with divergent strabismus, and no other ocular signs. In addition there was a paresis of the limbs on the *left* side. Post mortem was found a caseating tuberculous mass in the region of the left upper half of the pons, encroaching slightly on the cerebral peduncles, and another mass occupying

the right half of the lower part of the pons. This latter lesion was pushed aside without destroying the nervous matter, and, the authors consider, was only evident clinically in the paresis of the limbs. A. Ernest Jones.

A case of pancreatic infantilism (*'The Scottish Med. and Surg. Journal,' April,* 1904).—**Byrom Bramwell** records a remarkable case of infantilism due to defective pancreatic secretion, and improved by the administration of pancreatic extract. The patient at the age of eighteen did not look more than eleven years of age; the bodily development had apparently ceased at the latter age; the sexual organs were in an infantile condition; the mental condition was good; there was chronic diarrhœa, and the abdomen was swollen and tympanitic. Dr. David Young was able to determine that the pancreatic secretion was defective or absent by the following tests: (1) The stools contained a considerable quantity of undigested fat, which was much diminished after the administration of pancreatic extract; (2) when the patient was taking a milk diet the amount of phosphoric acid in the urine was greatly below the normal, and was increased by taking pancreatic extract; (3) by Professor Sahli's test. This test consists in the administration of capsules containing iodoform surrounded by a glucoid substance, which is insoluble in the gastric and intestinal secretions, but which is soluble in the pancreatic secretion. If the pancreatic secretion is active the glucoid wall of the capsule is dissolved and the iodoform is set free; iodine in the form of iodides and iodates can then be demonstrated in the saliva by testing with chloroform and nitric acid; the nitric acid sets free the iodine, which gives a pink colour to the chloroform. In this case, after the administration of a test capsule, iodine could not be detected in the saliva, but the capsule was passed undigested.

Treatment by means of a glycerine extract of pancreas was begun, and the result had been remarkable improvement, both as regards the diarrhœa and the bodily development and growth. The patient had grown in two years $5\frac{3}{8}$ inches, and had increased 1 st. 8 lbs. in weight; the diarrhœa had ceased; there had been a growth of pubic hair, and the penis and testicles had developed. Dr. Bramwell considers that the condition present must be considered a distinct clinical entity—a new disease which has not hitherto been recognised. The results of treatment seem to show how the disease can be cured. He had carefully excluded all the other causes of infantilism, such as cretinism, etc. G. A. Sutherland.

Case of juvenile tabes (*Société de Neurologie, December* 3, 1903).—**Camus** and **Chiray** showed a girl, aged 22, who had suffered for six years with gastric crises. The crises were extremely violent, and reduced the patient for some hours to an almost desperate condition. There was no other evidence of stomach disease, and no stigmata of hysteria; the general health was excellent. Argyll-Robertson's sign was present early in the case, but disappeared later. Other permanent signs of tabes were, however, present, such as total abolition of all the tendon reflexes and root anæsthesia, limited to the distribution of the eighth cervical and first dorsal, especially in the left side.

There was no evidence of acquired syphilis present, whilst, on the other hand, the father was unquestionably syphilitic and had died of general paralysis; the mother had lost three children out of seven, and the last-born of the living children was a clear case of hereditary syphilis.

A. Ernest Jones.

On the etiology and pathology of scleroderma in the new-born (*'Riv. di Clin. Ped.,' January*, 1904).—**E. Mensi** contributes a diligent study of eleven cases, divided into two series—one composed of six cases where there was a local or general infection, such as bronchopneumonia, accompanied with nephritis, and the other composed of five cases where the scleroderma was the result of the same infection, but not associated with any evident renal lesion.

The first series are confirmative of the theory of Comba, who maintains that this condition is the effect of functional insufficiency of the kidneys, due to acute nephritis and secondary to a local or general infection.

The second series seems to show that scleroderma may be simply a concomitant of a local or general infective process, favoured in its morbid action by special conditions of circulatory debility and by the hypothermia which is met with in prematurely born children, in whom the occurrence of the disease is frequent. VINCENT DICKINSON.

Investigations concerning sclerema and scleroderma in the new-born (*'Boll. della Soc. Med. Chir. di Pavia,' April*, 1903).—**A. Monti,** from his own observations and analysis of the literature of the subject, comes to the conclusion that the morbid processes thus described, either from a clinical or pathological point of view, do not constitute a single pathological unity, but must be differentiated into three principal groups: - 1st, an inflammatory scleroderma of the cutis, such as may be caused by infective emboli in the skin; 2nd, an exudative scleroderma due to disturbances of circulation from pulmonary or renal affections, such as those described by Comba in connection with an acute nephritis; 3rd, a genuine sclerema, characterised by induration of the subcutaneous adipose tissue without œdema. This proof has nothing in common with the others, and the author considers the question of its bacterial origin to be still *sub judice*.
VINCENT DICKINSON.

Abduction of the toes (fan sign of Babinski) (*Société de Neurologie, December* 3, 1903).—**C. Babinski** first referred to a previous communication in which he had pointed out that abduction of the toes, in response to plantar stimulation, formed one of the evidences of pyramidal disease included under the term *phénomène des orteils*, in England usually called the "extensor response." He now described the phenomenon of associated abduction of the toes in similar cases. This is elicited by getting the patient to alternately flex and extend the trunk on the thighs, first placing him on his back in bed and keeping his arms crossed on his chest; the toes will then gradually separate, the one from the other. This sign may or may not be found in conjunction with the one previously described, but has the same significance. It is more common in infantile hemiplegia than in adult hemiplegia, and more frequent in hemiparesis than in hemiplegia.
A. ERNEST JONES.

Movements during rest in disseminated sclerosis (*'Journal de Neurolgie,'* 1903, *No.* 3).—**Bouchard** describes a case of this disease in a boy of sixteen, in which incessant involuntary movements, first of the lower limbs and later of the upper, persisted during rest. He refers to other like cases in the literature of the disease. THEODORE FISHER (Bristol).

Asymmetry in painful sensations.—(*'Journal de Neurologie,'* 1903,

No. 8).—**Ioteyko** and **Stefanowska** have experimented with Cheron's algesiometer to find out whether the asymmetry in sensation generally extended also to pain. Forty-seven out of fifty subjects were more sensitive to pain on the left side than on the right, although they were right-handed. This is contrary to what is found in other sensations, and therefore suggests that the centres for the various sensations are different.

THEODORE FISHER (Bristol).

Contribution to the cure of rickets by phosphorus (' *Riv. di Clin. Ped.*,' *January*, 1904).—**N. Fedele** reports six cases in which, after a month's treatment, he noticed great improvement in the hardening of the bones, in the eruption of the teeth, and in ability to walk, and a beneficial effect on the laryngeal spasm, hyperæsthesia, irritability, etc. He considers that phosphorus neutralises the toxic substances which attack the bony and nervous systems. These toxic substances can originate in the gastro-intestinal tract from dyspepsia, bad feeding, putrid fermentation, etc., and their variety explains the few unsuccessful cases of treatment by phosphorus which is unable to neutralise all of them. He gives half a milligramme of phosphorus dissolved in a teaspoonful of almond or cod-liver oil twice a day.

VINCENT DICKINSON.

Loss of tendon reflexes in tumour cerebri (' *Archives de Neurologie*,' *January*, 1904, *p.* 1).—**F. Raymond,** in a lecture on a case of tumour cerebri, discusses the question of the loss of deep reflexes in certain cases. Cl. Philippe and T. Lejoune had, at his suggestion, investigated the subject pathologically and clinically. They confirm the work of Mayer, Hoffmann, and Batten and Collier with respect to the morbid anatomy; the cord lesions found most constantly were degeneration of the posterior columns, but, occasionally, less marked lesions were found in the anterior root zones, and even in the lateral columns. The posterior column degeneration followed no systemisation, involving indiscriminately the external bandelettes, the cornu-radicular zones and the posterior columns proper; but they never included any endogenous fibres, such as the descending endogenous fibres of Gombault and Philippe's triangle, the centrum ovale of Flechsig, the peripheral dorso-lumbar bandelette of Hoche, etc. The intensity of the degeneration increased as one approached the root ganglion, thus giving a clue to the pathogeny. No evidence of an inflammatory process was found. The myelin sheath was first affected and the axis cylinder preserved for a very long time after; later, however, sclerosis might ensue.

Their view of the pathogeny of the lesions was arrived at by a consideration of the facts that the posterior root ganglia were very large, usually two to three times the normal size, and contained large lacunæ into which a stylet could be introduced from the subarachnoid space. They consider that the high pressure of the cerebro-spinal fluid in these cases induces a displacement of the cells and fibres of the posterior root ganglia, with a consequent degeneration of the cord fibres.

The symptoms produced are radiating pains, root anæsthesia, loss of deep reflexes, and sometimes slight ataxy, all of which are more common in the lower limbs.

A. ERNEST JONES.

The acromial reflex (' *Obozrénié Psichiatrii*,' 1902, VII).—**Bechterew** writes that, on striking the acromial and coracoid regions of the normal arm with a pleximeter, a slight flexor movement of the forearm occurs, due to the

action of the coraco-brachialis and the short head of the biceps. In hypertonic cases, as in organic hemiplegia, the reflex is more active and may extend to other muscles. In that case the hand will rotate inwards and the fingers flex. THEODORE FISHER (Bristol).

The hypogastric reflex (*Obozrénié Psichiatrii*, 1901, VI; *Neurolog. Centralblatt*, 1901, XX).—**Bechterew** describes a hitherto unknown reflex, in addition to the "abdominal" and "epigastric" superficial reflexes of the abdomen. When one rapidly strokes the skin of the internal surface of the thigh below the inguinal fold, contraction of the lower abdominal muscles on that side follows. This reflex corresponds with the lower part of the dorsal region of the cord, and may thus mark the level of a lesion if it be present and the abdominal reflex preserved. It is more constant than the epigastric reflex; both are lost on a hemiplegic side.

THEODORE FISHER (Bristol).

Rare monstrosity of the face and brain ('*Nouvelle Iconographie de la Salpêtrière*,' 1902, *No.* 3). -**Haushalter** and **Briquel** describe a case of an infant with a large frontal tumour crowning a scarcely-formed face with a naso-bucco-pharyngeal cloaca. Life lasted 41 days, and the post mortem revealed a hemilateral hydrocephalus with a resulting frontal encephalocele. The limbs were deformed from the presence of amniotic bands. It is rare for an encephalocele to appear elsewhere than in the occipital region. A. ERNEST JONES.

A case of infantile latent cirrhosis of the liver ('*La Pediatria*,' *October*, 1903).—**G. A. Petrone** considers that the reason of the greater frequency of this disease in adults than in infants is, first, because the two great agents, alcoholism and chronic malaria, are absent in infants, and second, that inherited morbific taint shows itself mainly in the adult whose liver does not possess a nutritive activity and recuperative power like that of the infant. Further, that although infantile hepatic cirrhosis is rare from a clinical point of view, it is not so pathologically, as numerous autopsies show. The child, a female of $4\frac{1}{4}$ years, had suffered when six months old from frequent febrile digestive disturbances; at one year old measles with bronchitis lasting a month; a year later a febrile intestinal attack lasting three weeks, probably typhoid. No history of syphilis, malaria, or abuse of alcohol; after two years it had a little wine mixed with water. The father—a cook—was addicted to excess of food and alcohol. The child was admitted for bronchopneumonia, supposed to be a sequela of diphtheria, and died five days later. The liver weighed 508 grs., surface slightly granular, mottled yellow and red, tough. Spleen 71 grs., dark red, with thickened capsule and trabeculæ. Microscopically the liver showed marked connective-tissue proliferation in the portal and biliary areas, forming here and there islands more or less extensive with branching trabeculæ, and in parts abundance of small round-cell infiltration with new-formed blood-vessels having a single endothelial layer. Bile ducts and hepatic vessels were normal, while the portal showed thickened walls in connection with the surrounding connective-tissue, but only a small number were obstructed or obliterated. The author thinks that a special disposition to cirrhosis in this infant was caused by the alcoholic habits of the father, and that the most important factor was the frequent digestive disturbances and the attack of typhoid. The absence of clinical symptoms of cirrhosis (except urobilinuria)

was noteworthy, since the cirrhosis was of long standing, and confirms the opinion that it has usually a course slower, and often latent, in infancy than in adult age. VINCENT DICKINSON.

"Babeurre" for feeble children (*'Journal de Medécine de Paris,' 2nd s.*, XVI, *p.* 180, *May* 1, 1904).—**P. de Sagher** confirms the experience of Baginski, Heubner, and other clinicians as to the value of this substance. Babeurre, or buttermilk, is simply the liquid part left in the making of butter. It should be administered in the following manner:—Add a soup-spoonful of arrowroot or rice to a litre of buttermilk; place on a slow fire and bring the mixture to the boil, taking about twenty-five minutes to do so; during this time it is most important to stir thoroughly, preferably with a wooden spoon; about 80 grammes of sugar is then added, and the whole cooled. This mixture should be well stirred before use, and given in the same quantities as milk. Babeurre is of value in all disorders of digestion in children, but more especially in the chronic gastro-enteritis and general wasting cases, when hardly any kind of food is tolerated.

A. ERNEST JONES.

Contribution to the study of the pathology of congenital megacolon (*'Riv. di Clin. Ped.,' December*, 1903).—**F. Valagussa** gives the case of a male, 3 years old, that had exhibited since birth obstinate constipation, evacuations only taking place every six or eight days. No action had taken place for three days previous to admission, when the child was comatose, with nocturnal convulsions, thready pulse, and marked meteorism. It died four hours later. Autopsy revealed fluid in the peritoneal cavity, colon displaced and distended with gas, hypertrophy of its walls, no ulceration or cicatrices. Histologically there was absence of mucous endothelium, in some places also of the tubular glands, the transverse muscular layer was uniformly thickened, the longitudinal layer thinned, increased vascularity in the submucous connective tissue. This was evidently a condition of congenital megacolon, and the author thinks that an abnormality exists in the embryonic evolution of the colon by which an extraordinary development takes place, specially in the connective-tissue elements —the muscular hypertrophy has only in a very small degree any functional origin, and consists in myopathy of the fibres. VINCENT DICKINSON.

Acute fatal chorea with hæmorrhagic pericarditis (*'Soc. Méd. des Hopitaux,' April* 15, 1904; *'Gazette des Hopitaux,'* 1904, *p.* 438.—**Dupre** and **Camus** report a case of the above. The patient, a boy of eighteen, was admitted with ill-defined symptoms, and was thought to have typhoid fever. He had a curious mental state, with indifference, inattention, and altered intellect. He later showed signs of dry pericarditis, then developed chorea with extremely violent movements. Five days after the onset of the chorea he died, and post mortem was found an adhesive hæmorrhagic pericarditis, with thick false membranes. A. ERNEST JONES.

Latent meningitis in pneumonia (*'La Riforma Med.', No.* 8, *February* 24, 1904, *p.* 197).—**V. Curlo** describes two cases of pneumonia, which developed meningitis, and whose only cerebral symptom was delirium. The diagnosis was only made by lumbar puncture, when a turbid fluid, rich in polymorphonuclear leucocytes, was withdrawn. From this fluid Fraenkel's diplococcus grew in pure culture. The author thinks that such a condition

is commoner than is usually considered, and believes that it is often ascribed to delirium tremens. THEODORE FISHER (Bristol).

Abuse of milk feeding in infants (*'Soc. d'Obstetrique, de Gyæc. et de Péd.,' January*, 1904; *'Gazette des Hopitaux,'* 1904, *p.* 406).—**Guinon** read a paper discussing fully a thing that had been pointed out before—the possible ill effects of milk in infants. A train of symptoms, including anæmia, malnutrition, indigestion, and enteritis were described as occurring in certain infants. The condition is more apt to supervene from the twelfth to the eighteenth month owing to the prolonged monotony of a milk diet. The treatment consists in stopping all milk, either temporarily or permanently, purging the child, and substituting another diet. This diet is not always easy to arrange. Various starches, given in vegetable broth, are suggested amongst other things. As a last resort, babeurre will almost always succeed.

One is a little sceptical as to how far the evil effects described could not be avoided by giving pure milk, as they seem to be due, quite possibly, to contamination. A. ERNEST JONES.

Meningitis complicating mumps (*'Soc. Méd. des Hopitaux,' March* 25, 1904; *'Gazette des Hopitaux,'* 1904, *p.* 360).—**Chauffard** and **Boidin** relate two cases. The onset of the meningitis was later than that of the parotitis, and it was marked by fever, headache, and especially by bradycardia. The diagnosis was established in both cases by lumbar puncture. There was a lymphocytosis in the blood in both cases, as also in the cerebrospinal fluid. THEODORE FISHER (Bristol).

Disturbance of suction in the newly-born (*'La Pediat.,' October*, 1903).—**A. Jovane** describes the case of a child of eight days which from birth was not able to draw the milk either from breast or bottle, or to swallow when given milk from a spoon although it seemed to make vigorous sucking movements. There was no faulty conformation either of maternal breast or of infant's mouth, but the cause seemed to be a transitory arrest of cerebral development or a retarded evolution of the cerebral nerve centres governing the mechanism of sucking, or an inco-ordination of the muscles of suction. Seven days later by persevering, the infant commenced to draw a little. In support of this theory the author mentions a case by Pinard of a similar condition where the parents were syphilitic and which subsequently developed hydrocephalus and died, and another by Le Page where the mother had diphtheria while pregnant and where the infant for fifteen days refused to take the breast. Three hypotheses thus present themselves: first, an inco-ordination or defective association of movements of the muscles of the mouth; second, that at birth all the movements necessary for suction do not exist owing to the development of the central nervous system not being complete; third, that in the course of pregnancy the mother is attacked by some toxic infection which affected the central nervous system of the fœtus. Infants affected in this way must be fed by breast milk drawn off and introduced through a stomach tube.

VINCENT DICKINSON.

Reviews of Books.

THE AFTER-TREATMENT OF OPERATIONS. A Manual for Practitioners and House Surgeons. By P. LOCKHART MUMMERY, F.R.C.S.Eng., B.A., M.B., B.C.Cantab. Pp. 220, Illustrations 29, Crown 8vo. Publishers: Baillière, Tindall and Cox, London. Price 5s. net.

As the author very rightly says, the after-treatment of operations is a subject of the very greatest importance and yet little has been written on it, at all events in a concise and easily obtainable form. Mr. Mummery has filled this long-felt want and filled it in an admirable and useful way. He takes up the first seven chapters with the discussion of the subject in a general way, following with the chapters devoted to the after-treatment of operations on the various parts of the body. In his introduction he treats of posture, sleeplessness, pain, thirst, bed-sores, and post-operative insanity or mania. Many useful hints are given, and some of the usually accepted ideas are dissipated. On two points only can we join issue with the author. It is hardly wise to recommend brandy and whisky as sleeping draughts, nor correct to say they "can be very seldom contra-indicated." Again, it is not always held that morphine is best given for pain after operations on the stomach or intestines. The following chapters on wound treatment, hæmorrhage, shock and collapse, and post-anæsthetic complications are particularly good. The chapter, too, on post-operative rashes and drug-poisoning will prove of great value to many confronted for the first time with such untoward complications. The chapters on special operations are made especially valuable by the setting forth of the most likely complications to follow such operations and the best means of preventing and treating them. The treatment is laid down on most modern and practical lines, and in itself makes the book well worth perusal. Altogether Mr. Mummery is to be congratulated upon the able way in which he has treated his subject, and the book will prove of undoubted value to those for whom it is intended.

DONALD ARMOUR.

VAGINAL TUMOURS; WITH SPECIAL REFERENCE TO CANCER AND SARCOMA. By W. ROGER WILLIAMS, F.R.C.S. Publishers: John Bale, Sons, and Danielsson, Ltd.

THE object of this little book as set forth in the preface, "to co-ordinate and arrange the 'disjecta membra' in a concise and accurate manner," is certainly attained.

Whether there is a need for such a work is a debatable question, and we are inclined to think that the demand for this book will be rather limited. However, any student of gynæcology who desires to refer to any point connected with vaginal tumours in infancy and at later periods in life will find here a most valuable bibliography.

Though we may not endorse the author's advocacy of the "Sequestration Theory of Cancer," we heartily concur that, in the present state of our knowledge, partial operative measures are futile, and in the most radical procedures alone can complete eradication be hoped for.

J. HOWELL EVANS

THE PHARMACOPŒIA OF THE NORTH-EASTERN HOSPITAL FOR CHILDREN. Compiled by a Committee of the Medical Staff.

THE compilers of the pharmacopœia are to be congratulated on the result of their efforts, as the little volume contains a very complete and useful collection of formulæ for use in diseases of children. In the second portion of the book the diet tables of the hospital are printed, and they certainly are of a very minute character. In the case of children over five years of age a distinct diet is given for each day of the week, and full receipts are appended for preparing the various foods.

The remainder of the volume is given up to directions to mothers for bringing up their children, which are very practical and easily understood by hospital patients. Finally, there are directions for the management of rickety children, for cases of ringworm, and for the care of paralysed children, all of which are excellent in every way. It will be seen that there is much useful information which will be of service to anyone having the care of children. LEONARD A. BIDWELL.

Preparations.

Benger's Food, when prepared for use as directed, contains the following ingredients:—Fat, 3·32 per cent.; soluble carbohydrates, 5·51 per cent.; starch, 1·45 per cent.; albuminoids, 2·64 per cent., of which ·40 per cent. are soluble, and ·53 insoluble, total 13·45 per cent. The method of preparation adopted by Messrs. Benger renders the casein less refractory to digestion, the curds being flocculent and like those met with in human milk. The standard of fat is a very high one, and in this respect it compares favourably with a good breast milk. The amount of starch in the preparation is quite small, and the soluble carbohydrates are well up to the standard.

Burrows' Malvern Water (The "Alpha Brand") is bottled direct from a protected spring in the Malvern Hills of guaranteed purity. Not only is it entirely free from organic matter, but it also lacks an objectionable quality met with in many otherwise good waters, viz. that of hardness. The total solids are less than 4 grains to the gallon. Only a trace of carbonate of lime and magnesia can be found, while sulphate of lime amounts to but 1·15 grains per gallon. This water also contains a little iron and a trace of iodide of potassium. Burrows' Alpha Brand of Malvern Water therefore posesses decided advantages for children's use. Its consumption removes the risk of contracting water-borne disorders, and for domestic purposes the most delicate infantile skins can only derive benefit from its topical application. Mothers should see to it that their children are supplied with the water and drink none other when travelling or holiday making.